



DOCTOR OF EDUCATION (EDD)

Teachers' sense-making during organisational change: shifting roles and pedagogy in a democratic approach to teacher leadership

Nizam, Tanya

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Teachers' sense-making during organisational change: shifting roles and pedagogy in a democratic approach to teacher leadership

Tanya Zeine Nizam

A thesis submitted for the degree of Doctor in Education

University of Bath

Department of Education

July 2020

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Abstract

This research focuses on the variety of ways in which teachers make sense of organisational change within the context of a democratic approach to decision-making. Taking a case-study approach and adapting a phenomenographic methodology, the research is set in an independent international school in China, with mainly globally mobile students and teachers. The pedagogical changes envisioned by the school's senior leaders and the process by which teachers were engaged to lead this change follows a liberal and democratic philosophy towards learning and human relationships. Drawing from literature about the cognitive-social behaviour of sense-making (Spillane et al, 2002; Coburn, 2005), Basil Bernstein's pedagogical theories (1971, 2000) and analytical models of teacher-leadership developed by Muijs and Harris (2007) and Supovitz (2018), I have developed an analytical framework to develop insights into the ways in which teacher-leaders, with their variations of interpretations of roles and pedagogy, can both progress and be hindered in a change process. Drawing from this framework, suggestions are proposed for developing teacher-leaders' awareness of hybrid approaches to leadership (Gronn, 2009) and for senior leaders to discern moments where their direct support is needed, even in a democratic decision-making environment.

Chapter 1

Introduction

1.1 Introduction to this section

This research aims to theorise and conceptualise a specific aspect of teacher-leadership, during organisational change in schools, where teachers are directed to make decisions, through discussion and consensus, about changes in pedagogy and ways of working together. As will be explained in this chapter, this thesis examines a case-study school where, while the term ‘democratic approach’ was not used when directing teachers, the expectations shared as school change policy are consistent with the ways in which democratic approaches are discussed in research about educational change leadership (Gronn, 2009; Gunter, 2001; McGrath et al, 2019, Goleman, 2000). The term ‘democratic approach’ therefore covers a broad range of behaviours and expectations that will be discussed later in this chapter and in the literature review. This thesis focuses on the diverse ways in which teachers make sense of their roles and the intended pedagogical changes at the school where they work, during a period of change. Placing teachers’ perspectives centre-stage of the organisational change process, their multifaceted interpretations are seen as key to understanding how change processes move forward, are held back and when support may be needed.

This research aims to contribute to the wider discussions of how the progress of organisational change in schools is reliant on the subjective understandings of teachers and their personal dispositions, beliefs and values (Fullan, 2007; Hunzicker, 2017). In addition, it is proposed that an awareness of teachers' ongoing multifaceted interpretations can provide policy-makers and senior leaders with insight of how to best support teachers' in reassessing their own roles and teaching practices while adopting democratic approaches of professionalism.

1.2 Democratic Approaches to teacher leadership

In modern organisational practices, democratic leadership structures, such as consensus-building processes and attempted removal of hierarchy in teams, are increasingly seen as a way to engage teachers' strengths in collaborative settings, enabling the creation of innovative plans and enactment of organisational change (Gronn, 2009; Gunter, 2001; Harris et al, 2003). While the term 'democratic' is not always used in schools where such changes are taking place, the underlying principle of drawing value from each individual's knowledge and perspective, as well as encouraging processes of collective decision-making is consistent with the modern drive towards democratic approaches of work. Collins et al (2019) describe democratic education to include the building of strong communities of teachers and students within schools so they may engage in critical discussion and make community-driven, co-constructed decisions about matter that impact them. They draw from Mursell (1955) and Deweyan democracy (Dewey, 1938) that considers schools as microcosms of society and therefore, with the purpose of strengthening democratic ways of life, need to engage all teachers and students as engaged in working together, recognising their rights and freedoms. McCrath et al (2019), referring to a similar approach to teachers'

behaviours, choose to describe this aspiration as ‘a culture of collegiality and consensus-seeking’. Regardless of whether or not the term ‘democratic’ is used by a school to describe such an approach of engagement of teachers and policy decisions and students in determining their learning, this thesis considers it valid to describe a culture that aspires to consensus building as taking a democratic approach to change.

In education settings, such as schools, when there is an expectation that the expertise of teachers can be engaged in making decisions through discussion and consensus, prevailing literature demonstrates that this can sometimes lead to successful enactment of change proposals, or in other cases, lead to barriers, due to lack of clarity of roles and purpose (Lukacs and Galluzzo, 2014; Torrance & Humes, 2014). Taking the approach that teachers’ perspectives and actions are central to the success of organisational change (Fullan, 2007), the focus of this research is teachers’ sense-making and how it relates to school structures and vision for change.

1.3 Teachers’ sense-making during organisational change

This thesis presents research conducted over a period of 18 months. Here, in a case-study school, teachers’ sense-making of organisational change vision, and their own changing practices in and outside the classroom, were tracked by conducting semi-structured interviews and analysing the sense-making narratives. Drawing from cognitive and institutional change literature, I conceptualise sense-making, here, as the cognitive and social behaviours (Spillane et al, 2002) that lead to teachers’ diverse interpretations of aspects of organisational change policy and their roles in leading its enactment.

The diverse ways in which teachers understand their roles in leading change are also often underestimated by senior leaders who endorse teacher-leadership (Torrance and Humes, 2014). The value of this study is to underline the complexity of sense-making in organisations and highlight that it is not a direct reflection of well-crafted written or spoken words from people in positional leadership in schools. Despite the intention of having a unified vision, the way that a school's transformation is conceptualised and expressed by school leaders and classroom teachers can vary in many ways (Spillane & Callahan, 2002; Gawlik, 2014; Ganon-Shilon & Sechter, 2016).

This research focuses on teachers' sense-making of their roles in changing classroom pedagogy and in their contributions to structures and systems that were set up for change enactment in the wider school environment. In the school where this research is set, teachers were presented with broad visions of organisational change, by senior leaders, and were expected to re-contextualise (Bernstein, 2000) these ideas in ways that could be used directly in their classrooms, and also to identify initiatives that would impact the wider environment of the school.

Teacher engagement with organisational change is often described in terms of agreement or disagreement (Spillane et al, 2002; Lukacs and Galluzzo, 2014) as a dominant narrative. If teachers' beliefs and interpretations of school policy and its ultimate expression in student learning is to be valued, there is a case to be made that aspects of dissent may also be part of the professional behavioural process and worthy of investigation. Investigating organisational change through the lens of teachers' sense-making, therefore, shifts the conversation to the cognitive and social processes that are constantly shifting the meaning

that is ascribed to professional roles, as well as ways in which pedagogical work is carried out at schools. Teachers' engagement in democratic processes, therefore, when viewed through the lens of sense-making, can be understood as a more complex and dynamic form of cognitive and social activity than simply being in agreement or disagreement with change enactment. This calls to question the different ways in which teachers can assert their leadership roles, in the context of their work and elements of change taking place, at times providing innovative guidance, and at other times, perhaps, following along with decisions made by others. Using one's expertise and participating in organisational change, for teachers, may then lead to different forms of leadership behaviours (Gronn, 2009).

1.4 Context of this research

1.4.1 Shifting pedagogy and teachers' roles

This research is set in a time when many schools seek to adapt to what is envisioned as an ever-evolving job market in their students' futures. Over two decades, the notion of developing students' 21st century skills, appropriate for a knowledge economy, has influenced reform of national and international curricula and associated teaching and learning activities in schools (Laurie, 2020). Therefore, students' ability to adapt to change and recognise their own strengths, needs and learning styles is of increased importance in educational discourse. To this end, pedagogies – or “what counts as valid transmission of knowledge” (Bernstein, 1973b, p85) – have evolved to encompass increased levels of student choice. Discussion of how curricula – or “what counts as valid knowledge” (ibid)– can support this type of pedagogy, and also be guided through student choice, is also under considerable debate in educational spheres.

In this thesis, the case-study school is in the process of undergoing organisational change with the aims of prioritising 21st century skills. It was expressed on the school website, and also in meetings with various stakeholders, that the school's organisational changes were driven by an awareness, among school leaders, that the educational needs of each student had changed along with the job market in the last few decades. In addition, the school wished to maintain its identity of being a forward-thinking, innovative international school with a respected profile in the international school network. The proposed pedagogical shifts were aligned with contemporary global educational discourse about personalisation of students' learning pathways, varied topics of study and assessment processes (OECD, 2006, 2018; Rose, 2016). This shift includes an emphasis on teaching transferable skills and supporting student agency so learners can self-guide their personal academic pathways, and in this way, learn the skills to thrive in an ever-changing job market. In educational media, this approach is often contrasted with what has been popularly coined as the 'industrial-age factory model of education' (Gatto, 2012), where educational standards fit the assumption that future jobs would conform and constrain individuals to socio-economic backgrounds and hierarchical work roles. With this backdrop, the school leaders expressed a policy vision of not only ensuring all students are supported by structures and pedagogy that allow personalisation of learning, but also that it would be teachers' expertise that would drive the details of what these structures, systems and pedagogy would be.

Hand in hand with this shift in pedagogical thinking are the changing expectations to 're-professionalise' (Donaldson, 2010; McCormac, 2011) teachers as experts in education both in and outside the classroom. In order to maximise the benefits of the expertise and

experience that teachers bring to schools, many schools have adopted democratic approaches to decision-making, (Gunter, 2001; Harris and Muijs, 2003) either in small teams or on a larger-scale as a cultural shift in the entire school. While democratic approaches encourage collective ownership of decisions and direction (Kilicoglu, 2018), the ways in which people engage with each other, and the work at hand, in these conditions are contingent to the aims and prevailing culture of an organisation. Furthermore, the nature of democratic approaches in organisations varies greatly, as do actors' perceptions of their roles when making collective decisions (Woods, 2005). As organisations undergo change and team dynamics shift, it can be argued that, to an extent, teachers are left on their own to make sense of changes to their professional roles (Torrance & Humes, 2014) both at the level of classroom pedagogical practice and at the level of collaborative problem solving with colleagues for initiatives that impact wider areas of the school.

At the school where this research is set, all educators in the school were expected to engage in the process of formulating the nature of the shift towards a more personalised learning culture. Senior leaders provided the directive that all teachers would be members of committees, working with colleagues who taught students of many different ages, discussing and formulating shared decisions about specific topics aligning with the school vision. The emphasis on consensus and all teachers having a voice indicates a democratic approach to teacher-leadership (Goleman, 2000) and during the time of research, teachers were adapting to this style of work with colleagues with whom they did not necessarily work on a day-to-day basis. Teachers therefore had to make sense of their roles within this change process as well as how they would implement changes in their teaching.

1.4.2 School setting

This research is set in a school which has the freedom to choose its own curriculum content, mainly within the International Baccalaureate (IB) framework. It is a fee-paying, non-profit K-12 international school in China, serving around 1,500, mainly globally mobile, expatriate students. A large proportion of teachers at this school arrive with a range of experienced from a variety of local and international schools around the world, and therefore bring a range of expertise which relates to the strong links that the school has nurtured, over 25 years, the school with the ever-growing 'Global International Education' (GIE) network (Bunnell, 2020). This GIE network can be described as a growing international industry of educational support, resources and quality monitoring processes. The school can be considered, here, to be in a 'transitional' phase (ibid), shifting to a new phase that is driven by the expectations of a globally oriented network of educational agencies, fee-paying parents who demand feedback and progression that better meets the specific needs of their own child, and the aspirations of globally oriented careers in their students' futures.

To this end, senior leaders of the case-study school of this research presented a vision of change, both systemic and pedagogical, in the school, to take place over a period of 5 years, which will be called LEARNING21 (L21) in this thesis. This vision was presented to teachers in whole-school meetings as a set of 21 targets. The ways in which teachers would address these targets were to be determined by the teachers themselves.

Here, the vision involved broad pedagogical and process oriented goals and teachers in the school were self-selected into committees with the aims of leading organisational change and deciding the details of what this would entail. While the school has three sections - an

elementary school, a middle school and a high school, each with its own principal, assistant principal, curriculum coordinators and middle leaders for year groups and pedagogical roles - teachers were expected to work in committees in comprising a mix from the three sections.

Therefore, while teachers were clearly being directed to carry out their work in new ways, in organised committees, there was an intention clearly articulated on the school website and within school documentation that during the 5-year process of L21, teachers would leverage their own professional expertise, developing progressive models of pedagogical practices through a process of reflective, consensus-based decisions. Through this teachers would determine, together, by consensus, what pedagogical changes were necessary and how they would work together to make the changes.

A source of complexity in the leadership structure at the school is that during the time of research, two systems of decision-making structures existed as hierarchical systems. One was the more easily recognisable positional leadership of directors, principals and middle leaders. The other was the L21 committee system with the overseeing steering committee. In both cases, hierarchy and democratic approaches existed in a number of different ways and it is within this setting that teachers grappled with change initiatives and their own shifting roles within the change process.

1.5 Personal Interest

As an educator in schools for over 20 years, in 7 schools in 6 different countries, I have participated in educational change and associated organisational strategies in many settings. I have observed, each time, how a policy message or pedagogical theme tends to

be interpreted in many different ways by actors in the schools and that this leads to change enactment often being quite different to what was initially envisioned and expressed by the senior leaders who initiate and guide the overall vision and direction. It has often struck me how despite many aspects of policy change being shared repeatedly, it is often only certain moments, and certain aspects of change enactment, that are grasped by certain individuals, and, as a result, certain ideas gain traction at the expense of others.

At the time of the research, as an International Baccalaureate (IB) teachers' workshop leader and New England Association of Schools & Colleges (NEASC) school accreditation leader, I have had a long-term interest in shifting educators' mind-sets and andragogy. I have found that it takes many approaches and stimuli to gain interest and commitment from the many individuals who make up a school. It is from this position that I decided to inquire into the social and cognitive hooks that lead to educators' professional understandings that can, in turn, lead to building organisational capacity.

1.6 Purpose of the study

This thesis seeks to contribute within the field of educational change management by researching teachers' diverse subjective 'sense-making' experiences (Coburn, 2005; Spillane et al, 2012) of the following aspects of organisational change:

1. The envisioned pedagogical changes in a school, including the way that teachers' pedagogical roles may change

2. The ways in which teachers perceived their own roles and contributions to the change process
3. Teachers' engagement with the change processes: using sense-making concepts, engagement can be analysed through teachers' evaluations of how the organisational change process matched their expectations.

A case-study school was used as a setting for this research, to add context and nuance to the theoretical supposition that teachers' widely diverse perspectives have a two-way relationship with the change process (Flyvberg, 2006). As teachers re-contextualise their idea and values about education along with the school vision, these different perspectives, and how they evolve over time, can provide empirical examples of how broad directives from senior leaders can, via teachers' sense-making, lead to success or barriers in progress.

Thinking of organisational change through the lens of teachers' subjective understanding can highlight opportunities for policy-makers to provide clarity and guidance at key moments, and in doing so, support a developing culture of democratic innovation. Sense-making is triggered when there is a shift from normative expectations, such as: something doesn't match expectations and is hard to define or when individuals or groups find that their sense of self is challenged (Weick, 1995; 2012). Therefore, focusing this research on sense-making can draw attention to specific moments or ideas that can support a vision of democratic approaches to change, or hinder the processes of collective innovation.

1.6.1 Gap in the prevailing literature

Prevailing literature of teachers' participation in organisational change in schools tend to focus on the effectiveness of change enactment and how it relates to teachers carrying out mandated or prescribed change initiatives, sometimes within teacher-leadership positions (Lukacs & Galluzzo, 2014). What is missing is an investigation into the subjective experiences of the teachers who are developing initiatives, making sense of what that means and what needs to be done to that end. Investigating organisational change through the lens of teachers' sense-making, therefore, shifts the conversation to the cognitive and social processes that are constantly altering the meaning that is ascribed to professional roles as well as ways in which pedagogical work is carried out at schools. In this way, we have an opportunity to appreciate the ways in which policy messages can proliferate and develop into something more elaborate as a result of teacher innovation and also notice the moments of sense-making where senior leaders or policy-makers may wish to provide support.

1.6.2 Research Questions

During the research period, through the school's change process called L21, teachers were expected to assert leadership behaviours, within democratic working committees, to make decisions-about the details of the organisational changes. In doing so, teachers had to make sense of the school vision for pedagogical change as well as the ways in which professional collaboration would support and create the changes. In both cases, teachers' roles were shifting, through the sharing of ideas, the provision of new structures, such as mentoring systems, flexible scheduling and committee structures specifically created for the organisational change process. Following the premise that teachers' sense-making of these

ideas and structures are central to the proliferation or stunting of change progress, the following research questions focused the inquiry into teacher-leadership during organisational change.

The over-arching research question is as follows:

Within a democratic teacher leadership approach, what do teachers' sense-making narratives reveal about their diverse understandings about the organisational change vision and the roles that they can play in the organisational change process?

To place the question in the context of the case-study, subsidiary research questions are:

RQ1: ***What do the sense-making narratives of teachers reveal about the diverse ways in which the school vision of personalised education is understood and what it means for a teachers' role?***

RQ2: ***What do the sense-making narratives of teachers reveal about their understanding of their roles and contributions as teacher-leaders within the democratic approach of their school organisational change process, over an 18-month period?***

RQ3: ***In what way does teachers' engagement shift, along with their expectations and perceptions of the organisational change process, when applying an analytical model developed by Luttenberg et al (2013) to track teachers' sense-making over an 18-month period?***

1.7 Methodology

1.7.1 Phenomenography as a method for data-collection and analysis

Phenomenography is an interpretive approach to understanding diverse interpretations of social phenomena, through the experiences of actors, and has been used in organisational change research (Sandberg, 2000) as well as research into pedagogy and learning processes. To marry the notion of the social and cognitive act of sense-making with the processes of empirical research, I have chosen phenomenography as the methodological approach to this inquiry. With actors' interview data as the core bulk of data, variations of their experiences are then identified, through an open-coding form of analysis, in categories. These categories provide conceptualisations of the experience of the phenomenon of organisational change in their school.

Phenomenography provides the opportunity for emic concepts of participants' perspectives to emerge, and following this, further analysis can be conducted through the lens of etic concepts that provide analytical explanation. In the research presented in this thesis, coding and analysis was conducted in two main stages of coding (emic and etic), in an iterative process. This will be discussed further in Chapter 4 Methodology.

1.7.2 Data collection

The principle method for data collection, in line with phenomenographic methodology, was semi-structured interviews. Teachers, including middle-leaders, received an open invitation to participate in the research and there were 15 participants in the two phases of data collection over two years. 5 of these participants were chair-facilitators of L21 committees and members of the L21 steering committee. 6 participants were in middle leadership

within the positional hierarchy of the school. In addition, I collected publicly available artifacts, such as information from the school website, school blogs and leaflets to support data analysis in the school's context. It is important to note that my personal involvement in the school, as a teacher and chair-facilitator of an L-21 committee also required a level of reflexive research practices which are explained in more detail in Chapter 4 Methodology.

1.7.3 A case-study approach

In this research, I use the setting of an independent international school in China as a case-study to bring context to theory about ways in which sense-making plays a role in policy messages as they move through a school environment.

A limitation of case-study research such as this, is that while it can examine the ways in which organisational change and pedagogical strategies are conceptualized, it is based within the unique context of a single, specific K-12 International school in China. I have chosen this approach for the very reason that it is contextual in nature because examining the way that the analysis unfolds and how the phenomena is understood through a case-study provides the examples and descriptions that bring meaning to what would otherwise be de-contextualised theory (Flyvberg, 2006). While the ability to generalise across different examples is limited in case-studies, an understanding of the context of the research can provide a colour and flavour of practical use of the theories used. It can be argued that the generalized conclusions within the case-study itself provides examples of patterns in social phenomena that can be comparable during analysis of other contextual settings. In this thesis, my attempt is not to generalise what happens in schools going through change, but to use models adapted to their context in order to provide language

and explanatory power to the educational context of organisational change. What is generalized, therefore, in this case, is the nature of sense-making in enabling or disrupting aspects of organisational change.

1.8 Structure of Thesis

This thesis includes a literature review about the core concepts involved in this research. To this end, in Chapter 2, I will first present the literature on organisational policy change as social enactment of educators' understanding and will then move on to discuss the nature of sense-making in educational organisational change. The second part of the literature review will be dedicated to a discussion about pedagogical shifts towards personalised education and the changing role of teacher-leaders. Chapter 3 will review the literature associated with the analytical models that are used to further theorise how structures and ideas relate to diverse sense-making during organisational change. Chapter 4 will discuss methodological features of this research. Chapter 5 explains the context and setting of the school and the vision presented to teachers. Chapters 6 will present the results and discussions of the research in light of the three research questions. Finally, Chapter 7 will cover the conclusions and limitations drawn from this study, as well as suggestions for further research.

Chapter 2

Literature Review

2.1 Introduction

This chapter explores the literature about the concepts introduced in the introductory chapter and pertinent to this thesis. First, I will discuss the notion of organisational change in relation to the sense-making (Weick, 2012; Coburn, 2005; Spillane et al, 2002) processes that teachers undergo to enact the change. The mutual relationship between the two concepts will be explored further by highlighting the way that organisational change triggers teachers' sense-making processes. Next, the concept of teacher leadership will be discussed as both a strategy for organisational change and as an aspect of teachers' professional roles that can be ambiguous and open to many interpretations (Torrance & Humes, 2014). It will be shown that when there are expectations of teacher leadership, particularly in a loose culture (Hunzicker, 2017) with intentions of collective decision-making, the scope of teachers' roles in the change process can be ambiguous. As a result, there can be a space of dissonance in understanding as teacher-initiated action interacts with school vision directives. Following this, contemporary discourse about personalising the educational experience for school students will be presented and the roles of teachers in this changing context will be discussed. In accordance with the overarching purpose of researching the teachers' diverse perspectives of their experiences of organisational change, a connecting thread in this chapter will be the socio-cognitive process of 'sense-making' (Coburn, 2005; Spillane et al, 2002).

Underpinning this research is an understanding that the meaning of policy directives are perceived and transformed through actors' subjective experiences into a myriad of messages and actions as they move through the organisation from a policy idea to

consequential actions of teaching and learning in the classroom (Gawlik, 2015). Systematised, procedural structures and directives, that Bernstein (2000) refers to as *vertical discourse of knowledge*, impacts the ways in which these messages and actions become part of the common-sense understandings and narratives of actors. Investigating organisational change processes with a focus on sense-making makes visible the aspects of change policy that are noticed by teachers, acted on and in what way. Therefore, teachers' sense-making of organisational change can be a lens through which pedagogical change directives and teachers' own roles in change enactment can be understood in different ways and why.

In a school endeavoring to take a democratic approach to teachers' developing leadership in designing and implementing organisational changes, teachers' sense-making has the ideal environment to flourish. It is proposed that policy-makers and senior leaders in schools could benefit from developing a nuanced awareness of how these variations of sense-making can impact teacher engagement with organisational change processes, as will be explained further in the next section.

2.2 Organisational change

Organisational change enactment has often been researched through an analysis of cause and effect of specific policy initiatives, or with the outcomes of the change being a key area of examination (Lukacs and Galluzzo, 2014). In contrast, the research presented here does not focus on how well the policy change has been fulfilled, but instead focuses on the way that teachers interact with organisational change processes through the socio-cognitive process of sense-making (Spillane, 2002; Coburn, 2005; Weick 1995, 2012). While this research focus and the insights from it do not claim to replace the type of research that focuses on the quality of learning outcomes and sustainability of change, it presents a perspective of teacher leadership during organisational change that is often overlooked.

2.2.1 Organisational change as a social outcome of sense-making

The research presented in this thesis conceptualises organisational change as interconnected episodes of sense-making, which is both a cognitive and social activity. Thinking beyond the behaviour changes necessary for organisational change to come about, this research draws from cognitive psychology in the context of organisational change and considers the cognitive process of sense-making to be a component of behaviour, and that this sense-making does not occur the same way or at the same pace for all actors for all elements of a policy directive (Coburn, 2005; Spillane et al, 2002). For a number of reasons, including previous work experiences and areas of professional interest, teachers in a school are likely to pay more attention to certain aspects of policy messages over others (Coburn, 2005). The way that policy directives eventually impact classroom practices is therefore reliant on the interactions and transformation of meaning by many actors.

Organisational policy change is then not about written rules being read and understood identically and enacted as the writers intended (Bacchi, 2000; Shaw, 2010). Instead, it is a discursive, changeable entity with a quality of interpretation. What is to be known in an organisation and how it is to be done, is therefore re-contextualised (Bernstein, 2000) by actors who then establish what is possible. So, when enacting policy, “people generate what they interpret” (Weick, 1995).

Now that I have defined organisational change as the outcome of sense-making of many individuals and groups, I will now turn to the discussion of how organisational change triggers the sense-making process.

2.2.2 When does sense-making occur during organisational change?

In this research, applying the lens of sense-making to organisational policy change shines a light on key areas where teachers focus their ideas and responses to school reform. Weick (1995) described sense-making as something one does when things don't feel right or when one's sense of self is challenged. This is not necessarily a negative emotion or experience, and as suggested by Dasborough et al (2015), any strong emotional response to change could also infer that the teachers care about and are motivated by the nature of the change.

Taking a closer look at the mechanisms of sense-making, drawing from cognitive psychology, Weick (1995) described sense-making as at first noticing the ambiguity of ideas, piecing together aspects of a phenomenon and creating a mental map. This mental map, also known as schema (Gentner & Stevens, 1983) within the field of cognitive psychology, is then evaluated against existing mental maps and new beliefs or understandings are developed. This can then be associated with action of some sort, and the sense-making process evolves as the actions and ideas take their course. It is important to note that schema are not simply a collection of objects, but include constructs such as tacit knowledge, causal patterns of explanations and imagined projections of possible scenarios. (Weick 1995). So, as a natural cognitive process, sense-making can lead people to imagine predicted outcomes of a situation based on previous experiences of cause and effect (Greeno, 1989; Vosniadou & Brewer, 1992) and this can impact their response to change.

Weick (2012) describes how individuals and groups are selective with their sense-making, developing narratives in order to create coherence and justifications of actions. Coburn's

(2005) work also indicates that this cognitive act of selective sense-making bring legitimacy and coherence to policy elements for the teachers in the schools that present a cognitive challenge. Personal values and emotions play an important role in determine the aspects of policy that are noticed, chosen and become part of the sense-making process. In this way, teaching and making sense of new practices are not a cognitive activity alone, but equally emotional practices (Hargreaves, 1998). These stories, as mental constructs, then influence what is noticed next and so the sense-making process continues, eliminating and compounding different aspects of organisational change (Gawlik, 2014; Weick, 1995).

As dynamic processes, the social and cognitive attention of actors can shift and change (Spillane, 2002). Through comparative case-studies, Coburn (2005) demonstrates that this also means that individuals in the same organisation may notice and not notice different elements from one another, depending on their interactions with people, while also relating to past experiences. According to Weick (1995), Spillane et al (2002) and Coburn (2005), when ideas presented in policy change may seem familiar or appear to match existing ideas, there may be little reason for sense-making and therefore, the sense-making process may not take place. There could be little value associated with doing the work involved and therefore less motivation if the desired outcome of policy does not match personal ideas of what is desirable (Spillane et al, 2002).

Actors in a reform process are sometimes more likely to notice aspects of policy change that affirm their own beliefs of what is feasible or desirable and this may lead to superficial changes while critical elements of change may remain unaddressed. Hill (2001), noted in a study involving mathematics policy reform, that teachers, despite dedicating considerable

time and effort to implementing new policies, recognised and made sense of aspects that led to integrating a few changes to their practice, while missing crucial underlying understandings. Haug (1999) similarly describes a study where teachers of the same school, who had varied understandings of the underlying values underpinning a new mathematics programme altered their practices to varying degrees, depending on how they interpreted the policy intentions.

There could be a cost to one's sense of identity as an educator if certain aspects of work are considered to be the best new way of doing things, and yet are different to one's foundational beliefs about the role of education. Spillane (2000) illustrates an example of an elementary school teacher who took personal enjoyment in literature and believed this to be central to developing her own and her students' ability to understand different perspectives. She saw this aspect of literature as the core purpose of education but had no such beliefs about mathematics. Therefore, a selective bias led to an easier recognition of the policy messages (Spillane et al, 2002; Coburn 2005) about literacy reform and therefore deeper participation, due to this conforming to personal values. In the research interviews, it appeared that she was less inclined, however, to reason with mathematics at a deeper level or to recognize the offered changes for what they were as part of school reform. In the teacher's account of her reasoning and motivation it was clear that it was not a case of refusing to comply with initiatives, but rather an understanding of the task that was skewed in favour of one element over another.

Coburn (2005) suggests further reasons why teachers develop a greater or lesser attachment to certain aspects of policy messages – how relevant the issue is to one's own

immediate work and what knowledge one brings from outside the organisation. She explains that sense-making not only occurs to understand direct policy change messages, but to also make relational connections with other loosely connected fragments of knowledge and practices within and outside the school. Coburn (2005) explains how even when in general agreement with the overall idea of the change being implemented, teachers are more likely to engage with aspects of change related to their normative day-to-day work and professional role. In a comparative case-study of two schools undergoing change, she explains how some items of school policy were noticed as they related to professional learning that had taken place outside the school, while other elements had not been grasped to the same extent. Similarly, Carpay et al (2013) discuss that teachers in school reform seek solutions within their own work context, often ignoring aspects of reform that are related to their work, but not directly visible to them. This can mean that educators may become stuck in their own context of work without seeing the larger picture or relevance to other members of their learning community.

A strength of sense-making, as a theoretical concept, is that it provides a way to research teachers' interactions in organisational change beyond compliance, agreement, disagreement or rejection. It suggests that teachers' attention focus relies on cognitive hooks of meaning that motivates further thought. Theorising through sense-making places teachers' agency, thinking and action within the same concept of social and cognitive iteration. What Ketelaar et al (2012) describes as the 'darker side of agency', or a deliberate choice to sabotage change, might then, instead, be understood as one aspect of transformation of meaning (Spillane et al, 2002) in a larger sense-making process that does not necessarily reflect one's whole view. Educators' beliefs and actions can be then seen as

part of the dynamic cognitive processes of connecting with their past and future concepts (Spillane et al, 2002; Weick, 2012 and Coburn, 2005). Beliefs can then change over time as a search for meaning may take place retrospectively (Weick, 1995), and new experience can lead to new interpretations of past experiences (Fullan, 2007).

In undertaking this research, my interest is in understanding the nuances of sense-making and how this sense-making, as a dynamic process of action and cognition, interacts within situational contexts of organisational change. During school reform, teachers find themselves having to redefine the nature of their roles and professional benchmarks for success and do this repeatedly as they interact with the stages and changeable nature of school systems and policy messages through a variety of social interactions (Luttenberg et al, 2013). In the next section, the complexity of navigating the sense-making of a teacher-leaders' role while working in an open-ended vision of organisational change, is explored.

2.3 Deploying teacher leadership to enact organisational change

For a discussion about policy enactment through different forms of leadership, it is necessary to define the ways in which leadership is being conceptualised in this thesis.

When referring to senior leaders, in this research, I refer to non-teaching leaders whose role is to envision school goals, strategise and set guidelines to oversee the development and implementation of systems in schools (Ganon-Shilon and Sechter, 2017). To explain my use of the term further, organisational leadership, as a *noun*, can be seen as hierarchical, with senior leaders, such as the school director, members of the governing board, head teachers and principals dealing with positional roles of macro-leadership (Crowther et al, 2009).

Middle-leaders, with positional roles, are then responsible for implementing decisions

(Ganon-Shilon and Sechter, 2017) either top-down or grassroots initiative, and include all teaching staff who are involved in coordinating a programme, or supporting a group of teachers. This includes pedagogical year-team leaders, heads of departments, pastoral heads of year and special educational needs specialists whose responsibilities tend to involve groups of people. Many of these middle leaders may also be classroom teachers and therefore also could lead innovation on a smaller-scale or individual level of interaction. In the present study, the term teacher-leader refers to all class-room teachers, including middle leaders, in a school culture where there is an expectation that every classroom teacher contributes to school reform, including identifying solutions for pedagogical change and systems for effective implementation.

On the other hand, this thesis also refers to leadership as a *verb*, which can be defined as behaviours of creativity, innovation and influence. As an example, leadership behaviours may be seen in someone with or without positional leadership, who nevertheless carries out the acts of leadership by forging sustainable change, aligning groups of people towards a vision (Crowther et al, 2002) or by coordinating something to get done. Crowther et al (2009) take this further by describing teachers' micro-leadership – which focuses on interactions with one other person or small groups - often without positional authority, as based on mutual respect and goodwill, most often with a direct focus on pedagogical activities with students. A teacher without a positional title may also then apply these acts of influence and creativity at wider levels of the organisation, impacting systems outside the classroom - through communication in informal channels or perhaps through committees that encourage groups of people to meet to make decisions.

The formal systems and structures put in place in a school therefore influences the tacit, common-sense ways in which a teacher may view their mode of contributing to innovation and decision-making. A critical component of teacher-leadership, by this description, is that reflective on-the-job experience (Durrant & Holden, 2006) can lead to new behaviours that increase the hidden capacity of an organisation (Leithwood et al 2007). As we can see through this initial introduction of teacher-leadership within the discussion, the role of a teacher here could be multi-faceted and open to interpretation, with many possible levels of engagement with innovation or change management. Drawing from teacher-leadership literature, ways in which these roles can be analysed are discussed in Chapter 3 about analytical concepts. The role of teacher-leadership in democratic settings is presented next, followed by a discussion of how a teacher's role during change enactment can be open to many types of interpretations, even within the same school setting.

2.3.1 Democratic leadership

Democratic leadership is a term that has been applied to describe behaviours and relationships where decision-making, initiatives and management are a collective product of a team (Kilicoglu, 2018). The team may be a few people in similar roles, or it could be a larger team where formal positions of hierarchy may mix, although within that team, decisions are made together (Woods, 2005). In order to benefit from the experience and skills of teachers, many schools have endeavoured to develop cultures where open dialogue in heterarchical teams – where all views and power relations are intended to be equal (Torrance and Humes, 2014) – can support new ideas to flourish. This approach can be contrasted with the more traditional model of transforming an organisation through the

guidance of a single, or few, central leaders, or following the 'herosm' leadership figure who has a 'charismatically formed dynamism' (Gronn, 2009, p198).

It is notable that even though the two terms are sometimes used interchangeably, democratic leadership is not synonymous with *distributed leadership* (Kilicoglu, 2018), where power and authority for implementation are stretched over many individuals, including a mix of different hierarchical positions in the school; leadership and power can, after all, be distributed within organisations autocratically as much as democratically (Spillane, 2005). Assumptions about distributed leadership and the scope of democratic approaches can therefore vary within an organisation, leading to mixed messages about teacher-leadership. Democratic approaches might also be applied to pockets of teams within an organisation, even though the overall structure of decision-making in the organisation may remain hierarchical. For example, an organisation may have all major decisions made by a small team of senior leaders who work democratically among themselves. On the other hand, democratic leadership could end up being an emergent characteristic of distributed leadership (Woods, 2005), when roles within positional hierarchies are blurred in certain situations, and this evolves within the culture of the school. In the case-study school presented in this thesis, the expectations of teacher leadership can be described as both democratic and distributed, although neither term was used by senior leaders to describe the organisational change process.

Daniel Goleman (2000) explains that democratic forms of leadership are ideal when an organisation is unsure about the next steps that it needs to take, and that, in many ways, aligns with the purpose of the case-study school. Woods (2005) describes successful

democratic leaders as having developed the skills to be good listeners, encourage trustful exchanges and adopt respect and expectation for meaningful participation of “everyone as ethical beings” (p4). However, for the outcomes to be fruitful, through consensus agreement, for example, there needs to be a focused sense of progression towards a purpose and this is where senior leaders have a role of guidance for teacher-leaders (Starratt, 2001). Another key characteristic of democratic teams is that roles of individuals are clear. If roles are unclear, blurred or overlapping, this can upset the dynamics that lead to quality decision-making. The result can be incomplete projects and communication failures (Gastil, 1994).

Although many schools communicate genuine intentions of engaging teachers in democratic decision-making (Barth, 2001, Crowther et al, 2009), with the aim to empower teachers as professionals, teachers may experience acts of leadership that are at odds with their own expectations of democratic sharing. Even though senior leaders may engage teachers in decision-making in the name of equity and professional growth as well as sustainable organisational change, Gunter (2004) describes the label of being a teacher-leader, despite good intentions, may create an identity for a teacher that allows for easier control from positional leaders further up the hierarchy in the organisation. Lumby (2013) argues that distributed leadership is yet another device for maintaining a power status quo within an organisation by making power and political agenda less visible, and the same argument could be applied to a democratic leadership approach. Nevertheless, there is evidence that supports the claim that a contemporary goal in leadership is to create an environment where power and decision-making processes are increasingly transparent and open to cooperation throughout an organisation. Increasing transparency of decision-making

processes is an example of a direct attempt to avoid inadvertent use of school community members as merely a cover-up for power dominance. Along these lines, Purkey and Siegel (2002) theorise about 'Inviting' teachers, and other members of the school community, to participate at a level they see fit, as another model of leadership described as invitational leadership. Here, again, there is a concerted effort to forgo absolute power within the decision-making hierarchy of positional leaders, including the extent to which teacher-leaders' skills and expertise are used for innovation outside the classroom.

2.3.2 Making sense of roles and contributions in teacher-leadership

The idea of "re-professionalising" teachers, with leadership as an integrated part of their role (Donaldson, 2010; McCormac, 2011), has been a prevalent part of school organisational discourse for a couple of decades. Hargreaves (2009) explains how teachers are increasingly expected to be more than 'technicians' of their teaching craft and instead to be 'experts' in the field, offering this expertise beyond their immediate classroom teaching. Heterarchical collaboration - settings where individuals can share their expertise and resolve conflicts of opinion with a common aim - has therefore, often been seen as an ideal way to build capacity in an organisation. Lukacs and Galluzzo's (2014) analysis of this shift suggests this enables organisations to access contextual expertise of individual educators as well as enabling institution-side ownership over decisions. The issue here, however, is that when senior administrative leaders envision and then encourage the implementation of teacher leadership, they can often under-estimate the many ways in which their intentions and expectations of others are understood (Torrance and Humes, 2014). Some of the key ways

in which the meaning of teacher-leadership ambiguous and a source of confusion is explained next.

First, there is the issue of where and how the role and acts of teacher-leadership is initiated in an organisation. In some cases, the expectations of leadership could take the form of MacBeath's (2004) definition of being 'distributed', where the management of a section of an organisation is specifically handed over and defined by senior leaders. This can be contrasted with other cases, where the teachers' roles shift from being recipients of school change directives (Lukacs and Galluzzo, 2014), and instead are 'distributive' leaders (MacBeath, 2004), which means they are initiators of policy change and direction rather than just 'policy takers' (Gunter, 2004:38). This model of teacher leadership makes classroom teachers the hub of where the seed of change germinate and have the opportunity to spread throughout the organisation. A teacher-leader may, indeed, experience a combination of the two forms described above and there could be a blurring of acknowledgement of where the ideas and vision originated. This could be a positive notion, if the intention is to develop democratic cultures of ownership and decision-making.

Even when the relationship between leader and follower is articulated, within an organisation, as less hierarchical, the way that this relationship will play out is not always clear from the outset (Gunter, 2004, Leithwood et al, 2009a, Torrance & Humes, 2014). Blurring the boundaries between roles in an organisation can lead to diverse understandings of the extent to which teacher-leaders' decision-making should impact others. In Murphy's (2005) analysis of 13 definitions of teacher-leadership, a common thread among effective teacher-leaders is that they have a sense of vision, consider relationships and understand

the conditions that enable change action. Considering the first point, which is vision, in many cases, the senior leaders in a school provide a vision, and even when implementation is reliant on teachers' initiatives and decision-making, this critical aspect of teacher leadership may have been removed. With this element of vision provided by positional leaders or external agencies, the essence of a heterarchical – where regardless of positional responsibility, actors can be involved in defining problems and making decisions – work environment can find itself firmly placed within a hierarchical system of decision-making (Gronn, 2009).

Gronn (2009) argues that the issues of heterarchical action within an organisational structure of hierarchy could be overcome by viewing teacher leadership as hybrid leadership, with 'mixed leadership patterns' (p17). In this way, with a varied skill-set in teacher-leadership, a teacher can apply innovation and influence in different ways, depending on the context. Leithwood et al (2007) analysed the leadership actions of teachers who did not hold official positions of leadership and found mixed patterns of leadership behaviours including setting direction, supporting the development of their peers, redesigning organisational and instructional systems. They found that once a teacher had played their role deciding a direction to take, they would then shift their roles into a less directional role, often relying on senior leaders to support the process. In this way, skills of complex problem solving and influence were applied when needed, in the context of their work. An awareness of this hybridity of skills and behaviours can help teachers, then, to communicate their roles in a given context and avoid "talking past one another" (Spillane & Coldren, 2011, p26) while being agents of change (Lukacs and Galluzzo, 2014). Spillane et al (2007), too, observed hybrid leadership in a study involving 42 US principals who noted

their activities periodically through each day of the research. These senior leaders demonstrated that a third of their time they either worked in a non-leading capacity among teachers who sometimes took the lead in the task at hand. Timperley (2005) described teacher leadership that took time to evolve into hybrid patterns within a school, and that the shift was most successful when teachers were motivated to support the learning of their peers. These examples demonstrate shifts in school cultures where teacher-leadership can be described as activities that change along with the situation.

Lukacs and Galluzzo (2014) describe this a model like this to be more consistent with 'the modern era of continuous improvement' (p102) where teachers engage with areas of change that align with their areas of interest and contextual expertise, with a sense of ownership over identifying problems and solutions (Lukacs, 2009). In this way, teachers can create a few different identities for themselves, positioning themselves within in relation to others and the work being done (Harris and Muijs, 2003). The sense-making narratives presented in this research, in this way, are the raw material for viewing the way that teachers might position and reposition themselves, redefining their roles and role boundaries within the existing hierarchies of organisational leadership structures, by placing themselves within conversations using metaphors and learnt plots that support their positioning (David and Harre, 1990; Gordon, 2015). Evidence from these studies demonstrate, however, that support and guidance from senior leaders is necessary to enable teachers to develop an awareness of what roles and actions would work in their contexts (Leithwood et al, 2007; Muijs and Harris 2007).

The scope of teachers' influence beyond the classroom can be understood from a few different perspectives. Teachers have traditionally had autonomy and exercised individual decision-making within their own classrooms (Barth, 1988) and, in recent decades, in the context of collaborative teams for curriculum and pedagogy (Hargreaves, 2009). Therefore, the sense-making of leadership within the teaching profession has evolved with a variety of examples. In recent decades, teacher-led blogs and other on-line forums have gone on to represent some of the virtual collaboration and sharing of ideas of how teaching and learning might be evolving. Teachers who do not take on administrative responsibilities, and remain largely in the classroom, now have ways to lead pedagogically through conferences, workshops both in person and through digital online platforms and have created spaces for new roles and professionalism within the field of education. These activities of teacher-leadership feedback into the wider discourse about education in the 21st century as well as how the principles of democracy impact decision-making and acceptance of policy change. While this inspires many senior school leaders to set up processes to benefit from the expertise of teachers, the models for doing this vary greatly and are understood in a variety of ways (Torrance & Humes, 2015). This can lead to unclear boundaries between positional and non-positional educator roles even when expectations have been set that teachers will be agents of change (Durrant and Holden, 2006). Torrance and Humes (2014) reflect that rather than consider teacher leadership as a homogenous concept, clarification is needed in identifying boundary expectations and ways to navigate them.

Because many school leaders fail to appreciate that their encouragement of teacher participation can be understood differently by teachers in a school, it can be easy for them to assume that when given the opportunity, teachers will lead *transformatively* rather than

transactionally (Burns 1978). The former refers to changing cultures and expectations, while the latter refers to the endeavour of maintaining systems that already exist with the intention of keeping them effective. Through comparative case-studies, Muijs and Harris (2007) explain that in order for teachers to recognise their emergent roles and be empowered to engage their expertise in a way that builds whole school capacity, there is a need for senior leaders to do more than simply blur the lines between line-managers and teachers. They found that this form of leadership was more successful when clear articulation of the lines of support were set up to enable decision-making among non-positional teacher-leaders. Behaviours that build a shared vision of teacher leadership, therefore, rely on trust and coaching, without which teachers and positional leaders alike have varied perceptions of the types of actions that contribute to innovation. This type of coaching and guidance that also provides opportunities for new ideas to flourish requires an understanding of the ways in which teachers make-sense of different aspects of change in different ways and at different paces. The intervention and clarification from policy-makers or senior leaders appears to be a key factor of success.

2.3.3 What this means for teachers and sense-making

Senior leaders who aim to empower teachers to develop pedagogical initiatives may not have a common understanding of what this means and in turn, neither may the teachers. What this means in terms of individuals' roles and expectations remains blurry and can be a source of anxiety and confusion or even suspicion (Torrance and Humes, 2014). As mentioned earlier, this can lead to a 'false sense of consensus' (Diamond and Spillane, 2016 p. 251) about the role of the teacher and to what extent the decision-making is autonomous. Since as the goals of being a teacher, with aspects of integrated leadership,

appear to be a moving target, it could be helpful to embrace this notion of multiple identities or plurality of positions in an organisation with relation to others (Gordon, 2015). It can be argued that defining one's own positioning and role boundaries, and shifting them as the need arises, might be an intrinsic part of being a teacher-leader (Gronn, 2009).

2.4 Models of teacher leadership for organisational change

Analytical studies that focus on teacher-leadership and school organisational change more often than not focus on the success of overall outcomes (Lukacs and Galluzzo, 2014). There are, however, some models of organisational change that take a closer look at elements of change processes within organisational change, and in recent years, some have been applied to teacher agency and contributions to change. To do this, modern notions of teacher-leaders' activities and agency have been operationalised in various ways. Current literature includes examples of quantitative as well as qualitative research and often combine discrete categories with other models of fluid or dynamic systems.

The following three models are examples of ways in which organisational change has been researched with a core focus on teachers' leadership and perspectives. They have approached aspects of teacher-leadership in different ways by 1) considering teacher-leaders' direct activities within a context of change process, 2) through an analysis of teachers' perceptions and motivation and 3) through the ways in which various developing stages of teacher-leadership might impact changes at different organisational levels.

Example 1:

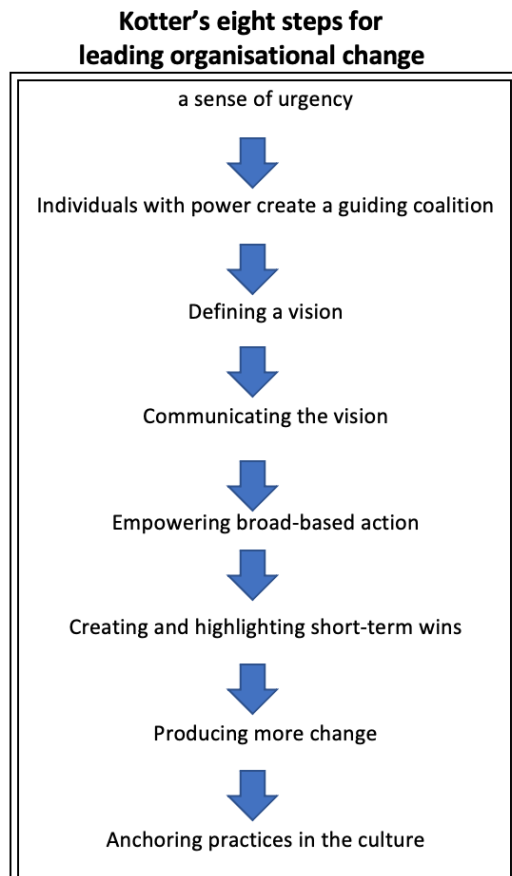


Figure 2.1: Kotter's eight steps, from Kotter, J.P. (1995)

Cooper et al (2016) carried out a study using Kotter's eight-steps (see fig. 2.1) for leading organisational change as an analytical framework to focus on teachers-leaders' actions at different stages of change enactment. Kotter's eight-steps of change were initially developed in the late 1990s and present a linear sequence of stages that Kotter argued to be essential to initiate, enact and sustain change in an organisation. Cooper et al analysed qualitative data, in the form of interviews, videos and artifacts, from 11 teacher-leaders in 3 schools through the lens

of Kotter's eight-steps and also through complex systems theory, which enabled a deeper understanding of the influence of embedded systems and context of the schools. One of the key findings was that teacher-leaders actions at first four stages of Kotter's framework could strongly determine the success of the subsequent stages and that teacher leaders' behaviours at these stages were greatly influenced by existing systems and relationships. As an example, when comparing teacher leader action in different schools, it was found that when embedded systems and context of the school support a direct focus on a particular change enactment goal, this is conducive to *creating a sense of urgency* (Kotter's first step). In a school where there are multiple foci, such as many simultaneous initiatives or acclimating to new work conditions, this defocuses the actions and language rhetoric of teacher leaders away from this sense of urgency. By combining Kotter's model with a

complex systems theory model (Opfer and Pedder, 2011), the researchers were able to ascertain the extent to which existing systems were embedded or diffuse, and the extent to which they created opportunities for observable and effective teacher leader strategies for change management. Furthermore, teachers' emic contributions in interviews and video data provided dimensions to understanding change management that enriched the etic concepts in the 8-step model.

This example of applying the Kotter's eight-steps model to a particular analytical focus goes some way in addressing the limitations of the linear nature of the original eight-steps.

Kotter's model, while celebrated within organisational leadership applications, has been discussed as limiting in its sequential nature, not taking into account the added complexities of inter-connected sub-sections of organisations and different occasions of change (Appelbaum et al, 2012; Sidorko, 2008).

Example 2:

Focusing on change management, specifically, as a key aspect of organisational change, a different model - the ICLT model (Implicit change leadership theory), developed by Magsaysay and Hechanova (2017) – examines the importance of how leaders meet the expectations of their 'followers' during times of organisational change as a predictor of effective change management. Here, followers' perception is understood as their mental models – or schema – of the ideal versus actual leadership traits in their organisation. While the ICLT model doesn't present sequential stages of change, it has been established as a predictor of effective change in the field of business (ibid). More recently, the ICLT model has also been explored in the context of educational settings. In private and public secondary schools in the Philippines, Guerrero et al (2018) applied the ICLT model to

examine the relationship between teachers' evaluation of their senior leadership with their perception of change management and personal commitment. With the assumption that teachers' commitment to change is imperative to the success of change management, this model focuses on the ways in which organisation members with a lower positional role in an organisational hierarchy evaluate those in senior roles according to the leadership character traits used in the ICLT model. Using etic concepts within a quantitative analytical model, the 'followers' mental models – or schema – of ideal senior leadership traits are compared with their perception of actual leadership traits of the people they are 'following'. The quantitative gap between the two can then predict perceptions of effective change management.

Magsaysay and Hechanova (2017) developed 30 traits for the ICLT model. They also developed 10 items to measure perceptions of change management processes. In the study conducted by Guerrero et al (2018), statistical correlation was analysed between these two sets of items. In addition to this, the researchers also correlated all factors with 18 items about commitment to change that was developed by Herscovitch and Meyer (2002). In this way, statistical relationships between the ICLT schema gaps, perception of effective change management and commitment to change were analysed.

Guerrero et al (2018) analysed 707 teachers' perceptions, collected via ICLT survey, and found that these teachers valued traits such as humility, hard work and initiative the most in their senior leaders. Other highly valued ideal were coaching, credibility and leading by example. These dispositional characteristics were valued higher than that of leaders' technical skills in implementing change. Statistically, it was found that the traits with the

smallest gap between ideal and actual perceptions were drivers of commitment to change.

Also, the smaller the gap of the trait, the greater the association with effective change management.

While in some ways limited to the etic concepts in the framework, this model can demonstrate correlations between teachers perceptions, the importance of their school leadership and organisational change in ways that might be directly comparable across different organisational cultures. It could be a climate review at different stages of organisational change and support ongoing understanding of when and how leaders can provide support to teachers. Can also be a springboard entry point to further discussion about aspects of change that are pertinent to members of the organisation.

Example 3:

Bringing our attention back to the nature of teacher-leadership, Damkuvienė et al (2019) investigated the ways in which elements of teacher leadership development correlated with elements of organisational change. So here, the more developed the teacher leader - presented as a sequence of stages - the more likely it is that they participate in specific aspects of organisational change.

Here, teacher leadership was conceptualised as a fluid and emergent set of traits that developed from an initial self-development stage towards a more outward-facing, community and communication-focused set of actions.. Therefore stages of leadership development for teachers is conceptualised as increasingly beyond the classroom and involved in the wider school community. This quantitative model statistically tested the correlation between elements of teacher development stages and elements of

organisational change. This model and its application in this way furthers the emphasis on teacher-leadership as developmental, situated within context, and tests the extent to which various elements may or may not have an impact on the organisational change at any given time. It draws attention to the idea that changed contexts may lead to different correlations.

The 3 models presented here are examples of ways in which etic concepts have been further developed to understand organisational change through the experience or perceptions of teachers. Teacher leadership is understood in a variety of ways and different aspects of change process are examined. In Chapter 3 Analytical Framework, I discuss the model developed for the research of this thesis. This includes the notion of teacher leadership as developmental stages in terms of autonomy, rather than in connection to organisational levels. Also, the relationship between idealised and actual perceptions and how they relate to engagement are also discussed used in a qualitative model in the research presented in this thesis, which is a more fluid approach to analysis than the quantitative model of ICLT.

2.5 Personalised education in schools

For over a decade, there has been an increased shift in educational discourse towards personalising the choices and pace of student learning and enhancing skills necessary for the modern world (OECD, 2006, 2018). The case-study school provides a setting to research the ways in which teachers made sense of this pedagogical change towards personalised education in the school's context. As an established international school without ties to a national curriculum, the school had the freedom to integrate contemporary ideas of of

curriculum design and personalisation of education in a way that they, collectively, saw fit as educators. This section provides an overview of some of the contemporary discussions about personalisation of education at the time of the research.

2.5.1 Why personalised education?

In recent years, policies and discussions about personalised education in schools have emerged as a response to ‘unprecedented’ changes in the labour market, as a result of globalisation, and beliefs about the way people learn effectively (OECD, 2018). Career pathways of the near future are projected to be reliant on individual choice and agency, with opportunities and constraints we are currently unable to predict, instead of the more traditional routes of progression of established roles within professions or organisations. To prepare students for a future that is ever-changing in scope, educational bodies including schools are shifting their visions towards students developing transferable skills that require a sense of choice and agency. Recognising the individuality of each student is at the core of this approach and the modern conceptualisation of personalised education (Paludan, 2006).

The use of the term can, generally, be separated from ‘individualised education’, which is a broad term that usually refers to the structured support of students with specific learning needs to provide access to mainstream education (Rakap, 2014). Personalised education, on the other hand, sometimes used interchangeably with personalised learning, refers to an approach that acknowledges the unique needs of every student in order to flourish. Todd Rose, in *The End of Average* (2016), argues that each student has a unique sets of interests,

skills and abilities and that having a standard, uniform pathway, based on meeting the needs of a perceived idea of what meets the needs of the majority, is harmful. Speakers such as Sir Ken Robinson (Robinson, 2007) who's workshops and videos have been widely viewed and quoted in educational spheres, popularised the idea of moving away from a school system that was based on values of the "industrial-age factory model" (Gatto, 2012) where it was considered possible to target one's education for the purpose of rising within a pre-ordained organisational hierarchy within a workplace through one's working lifetime. To this end, policy directions for personalising students' learning have taken a variety of routes, depending on philosophical foundations, perceived gaps in education, political and other social contexts.

2.5.2 Personalised education policy at a national and international level

Interpretations of what personalised education can mean and in which form it may be most effective appears, therefore, to be contingent to time and place.

Lourie (2020) describes how evolving curricula in New Zealand has been guided by global policy ideas of what is needed to support a knowledge economy – where knowledge and its application is a key commodity to drive successful economic growth. Drawing from Bernstein (2000) she describes how policy documents reflect how contemporary values from globally recognised bodies, such as the Organisation for Economic Co-operation and Development (OECD), combined with local values, have been re-contextualised within the consciousness of educators and in the way that public education has changed. In this way,

the nature of what knowledge is, has changed in the context of school, from ‘what students ought to know’ to ‘knowing how to do things’ (Bolstad et al, 2012, p11; Marshall, 2000, p194).

Over a decade ago, David Miliband, who was the UK Schools Standards Minister at the time, presented a vision and policy for wide-spread “personalisation of education” within the public system of education, emphasizing the building of “competence and confidence” through increased “voice and choice” following the “diagnosis of every students’ learning need” (Miliband, 2006). Since then, *The Future of Education and Skills 2030* project, launched by the OECD, aims to support countries in deciding how education can be more personalised at a national policy level. As explained in the guiding documents, this evolving project aims to help countries decide “what” knowledge, skills and values students need to ‘thrive and shape their world’ (OECD, 2018 p.2) and also “how” instructional systems can support this learning. This emphasis place a high value on students’ motivation and self-awareness with the intention of developing confidence and competence, described in an OECD article as a way to eventually “level the playing field” in a socio-economically diverse society (Jarvela, 2006).

On the flip side, a shift towards a more personalised education could be argued to be a response to a competitive market, gaining revenue in privately run independent schools and keeping up with modern trends promoted by international accrediting agencies. Schools under the banner of ‘International School’, such as the case-study school in this research, work under a myriad of norms to provide an education that is, in some way, considered to provide leverage for an internationalised world.

2.5.3 School-based strategies for personalisation of education

Strategies for personalising education tend to work at the level of classroom interactions and also at the level of school systems and environment conducive to choice. At a classroom level, teaching in line with ideas of 21st century skills has led to pedagogies of project-based learning, inquiry-centred unit planning, and structures - often technology-based - that allow students to self-pace through units of learning. At a wider school level, some schools have created flexible learning spaces, flexible scheduling and school-based decisions about what constitutes a level of knowledge competence that allows students to move from one unit to the next.

The concepts mentioned here and their perceived meaning are by no means uniform in different spheres of discussion. A commonality of all approaches is that a holistic view is taken of a students' individuality and that a "one-size-fits all" model is no longer appropriate (OECD, 2006) and that developing natural curiosity and self-confidence through creativity is increasingly important (CERI, OECD, 2018). A summary of different strategies and policy questions prevalent in current discourse of personalised education follows in this section.

An off-the shelf classroom tool vs a school-wide re-structure?

The term 'personalised education' is by no means uniformly understood. As explained in the US independent education news publication, *Education Week* (Herold, 2017), 'personalised education' could mean anything from software programs to whole-school redesign. At one

end of this spectrum of interpretation, a school could purchase programmes of 'personalised education' that allow flexibility of learning both in choice and pace, complete with digital systems for monitoring students' progress. In these cases, the concept of personalisation of learning is understood to be almost synonymous with digital online learning, with some face-to-face support, applied to specific courses or classrooms. A multi-million dollar digital educational industry has since developed based on the premise that teachers do not need to explicitly teach each chunk of learning face-to-face, and that technology can be used to personalise students' learning pathways, giving them freedom over choice and scope of learning. At the other end of the spectrum, personalised education could involve an entire re-conceptualisation and restructuring of a school's learning spaces, scheduling and curriculum progression, with policy considerations that are addressed in the context of the organisation. The OECD describes this version of personalization as moving beyond a 'pre-designed option' and involving the co-creation of what is valued among all stakeholders of the school in deciding what personalised education will be (OECD, 2006; 2018). Some schools may include pockets of personalised courses, for select students, but largely following a more traditional model of scheduling, assessment and content. The OECD also describes a version of personalisation as mass customization (OECD, 2006; 2018), where a diverse range of standardised components may be mixed and blended to personalize learning programmes for each student. This mix of models provides many frames of reference which might be a source of confusion when trying to define the best way to personalise education.

An issue with off-the-shelf programmes of personalised learning programmes has been explained as leading to breakdown in teacher-student relationships. Pane et al (2017),

suggest that an urgency to embrace new systems can lead to teachers misinterpreting the ways in which their roles change in the new learning environment. Teachers can sometimes lose the essence of their role, while attempting to manage learning from a distance. Since much of this software is designed to directly replace some of the work that teachers have done in the past through social interaction with students, such as setting assessments, there is a need to provide the social element of learning in other ways. There is a strong recommendation, therefore, that an ongoing experimental approach of monitoring and reflection is needed to gradually bring in the value of digital support alongside the evolving teacher-student interactions (ibid).

Real-world projects-based learning

To enhance students' individual skills and motivation for critical thinking and problem-solving, project-based learning or individual inquiry based on a case-study, is another dimension of personalised education that has impacted educational policy-making to varying degrees around the world (OECD, 2006, 2018). The 2015 documentary "*Most likely to succeed*", set in a school in San Diego, presents examples of how all curricula in the school is co-constructed with students, from the learning objectives all the way to how learning is demonstrated. Personalising education, here, is explained as focused on the development of skills that are much more conducive to the adaptive world of work that students are preparing for. This documentary was shown at the case-study school with an open invitation for all teachers and parents.

Strategies for students to self-pace according to their personal needs

One of the key ideas in personalised education is that of students self-pacing themselves through learning units. With self-pacing, if students are moving from topic to topic individually, the teacher is then not at the front of the classroom managing a consistent pace. The framing (Bernstein, 2000 – *more details of this concept in chapter 3*) of teacher-student relationships varies, depending on the strategies employed for managing this self-pacing process. Instead, the teacher plans and designs lessons and courses to allow students to self-navigate, often with the aid of technological tools. Group or individuals can then follow different versions of the same course, opting out of sessions in favour of others - responsibility for them could therefore be diffuse between more than one teacher. This also raises questions about the choice of curriculum units that students move between during their self-pacing and this discussion is continued as follows.

School-based decisions about competency of skills and knowledge

When faced with the notion that learning modules can follow each other in a number of pathways and that students can move from one to the next when they are ready rather than *en masse* as a whole age-related group, a key question here is which skills and knowledge allow a student to progress onwards from one learning module to the next. The *OECD Key Competencies* document is an example of one organisation's perspective on the types of learning objectives that can be developed in stages over the years, and involve characteristics of transferable skills to support new ways of making an individual's contribution meaningful in a learning community (OECD, 2018). What determines the competency to progress to another phase may not necessarily be the same in all schools' contexts. As an example, The Mastery Transcript Consortium (MTC), a network of schools – mainly in the US, and also in other countries - aiming to address 'unique skills, strengths and

interests of each learner’ describes a model of education, where school transcripts do not include standardised test scores of assessment, but instead represent ‘depth and transparency’ of ‘specific skills, knowledge block or habit of mind as defined by the crediting high school’ (Mastery.org). Here, individual schools define the elements of a students’ profile that are included in a transcript and are therefore of central value to student learning. An example of such an element could be ‘social and emotional acuity’ as well as more conventional elements such as “quantitative, technical and scientific fluency” (ibid). This example raises questions about the knowledge and skills that may be valued differently in a variety of school contexts and the extent to which a teacher-leader is responsible for making these decisions.

Changes in school-wide scheduling to support personalised education

There are also examples of schools that have restructured their entire scheduling system in a way that takes into account the interests of students. This echoes the description by the OECD (2006; 2018) of schools where the values of all stakeholders are taken into account while reconceptualising the way that learning takes place in the school. As an example, Templestowe School, in Australia, provides students with an elective class choice grid from which classes are chosen in line with interests and skill needs, which can also be adapted on an ongoing basis. Here, flexible scheduling provides students with access to courses where knowledge is applied in many ways including ‘music practice, part-time work and time to run their own business’ (tc.vic.edu.au). The notion of personalised education, from these few examples, demonstrate how a school might formulate course options in a flexible way and also that the courses on offer are likely to reflect the values of the school’s learning community, including teachers.

2.5.4 What this means for teachers and sense-making

A shift towards increased personalisation of education, then, means that teachers may experience a change in their roles in relation to students and the wider school community. Rather than carry out pre-prescribed curricula at a pre-ordained pace for a whole class of student, teachers may need to find ways to present learning materials in a way that allows students to move from one module to the next with supportive advice in a number of different forums. In the case of project-based, inquiry centred learning where each student may be creating individual projects, the teacher is no longer the leading guide through a course of set study, but instead is a type of learning consultant, facilitating student learning. At a wider level of school planning, teachers may be required to make value-based decisions about the type of learning modules that are offered and what constitutes sufficient learning to move from one self-paced unit to the next.

Clarity of understanding as to what personalisation of learning means in a school's context is critical to a teacher's understanding of their roles, and the expectations placed on them as professionals. This thesis shows that in schools that are making shifts in this direction, teachers find themselves reassessing the pedagogical shifts as well as their roles. With

sense-making at the heart of re-contextualising their work, teachers then have diverse ways of viewing what is possible or valid within their roles, and for the envisioned pedagogical changes.

2.6 Conclusion of Literature Review

When teachers are expected to work with each other to analyse and design the details of the pedagogical and systemic changes in their schools, this means that they have to make sense of complex activities and relationships beyond their roles within classroom. The ways in which teachers work and how they understand their roles within democratic processes of learning, understanding issues and finding solutions, can be blurry. The open-ended nature of such a work culture and expectation of teachers can lead to creativity, an expanded capacity within the school and sustained change. On the flip side, at key moments of sense-making, if roles, key purposes and scope of enacting change are not clarified, teachers can end up redefining their work in a myriad of ways that are incompatible or misunderstood by one another (Hunzicker, 2017; Wood, 2005).

Schools that have taken the challenge towards flexible, student-centred course choices and teaching methods are faced with the challenges associated with paradigm shifts for how educators interact with both curricula and students. The case-study school demonstrates how a school that had an ethos already conducive to collaborative consensus still found it

difficult to transition to a culture that takes a more fluid view of how a democratic liberal approach can reach the level of how students interact with their teachers, each other and how and what they learn.

This literature review provides the background for how sense-making will be explored and analysed through the case-study of organisational change. The foundations for teacher-leadership and personalised education with the intention of democratic decision-making has been explored. Furthermore, it has been discussed how explicit structures can be put in place in schools to support this type of work environment. These structures - such as digital learning systems, flexible timetabling, and planning committees - can be described as aspects of *vertical discourse of knowledge* (Bernstein, 2000), which act as conduits for sense-making, the re-contextualising of how people transform knowledge, both for how teachers create their roles and how students' learning occurs. Vertical knowledge, along other aspects of Bernstein's pedagogical device, will be discussed in the next chapter as analytical concepts for this research. These vertical knowledge structures, along with analytical categories of teacher-leadership will support the framework for analysis.

Chapter 3:

Analytical Framework

3.1 Introduction

The analysis of data was carried out in two stages. Following a brief synopsis of the first stage of data analysis, this chapter explains the analytical concepts that were adopted for the second stage of analysis. A more detailed description and explanation of the two-stage analysis process will follow in the next chapter, which focuses on methodology.

The first stage of analysis: Phenomenographic methods of categorising participants' sense-making was carried out as a first stage of analysis to discover areas where sense-making of the experience of organisational change varied. I focused on teachers' sense-making narratives as a way to identify aspects of organisational change that were most noticeable to them, either for reasons of agreement or disagreement, but overall because it gave

participants pause for thought. Drawing from Bernstein (2000), we could say that teachers were re-contextualising knowledge that had been presented to them as a broad vision by senior leaders, in other words, processing and repackaging the knowledge in ways that were meaningful to them. This is of importance, in this research, as it indicates areas where teachers' sense-making, beliefs and perceptions can hinder or forward change enactment and also when they may need supportive guidance from senior leaders. Preliminary readings of the interview data revealed that this re-contextualising was taking place for two key aspects of organisational change: a) for pedagogical change and b) for the ways in which teachers were expected to work together to enact organisational shifts.

The second stage of analysis: Through an iterative process of reading data and selecting theory that could explain and provide analytical concepts, I found that Bernstein's concepts of *framing* and *classification* (both concepts explained in detail in the next section of this chapter) provided the explanatory language for discerning ways in which teachers' made sense of both these aspects of organisational change. While these two concepts are most often used as a device for investigating the nature of curricula knowledge and teacher-student relationships, more recently, they have also been applied to organisational knowledge and how non-positional leaders re-contextualise knowledge in the context of their work (Hodern, 2017). An aspect of Bernstein's pedagogical device that I found helpful to explain teachers' sense-making was the *vertical discourse* (systematic structures) that scaffolds the types of sense-making that teachers may translate into *horizontal discourse* (common sense, fluid knowledge) (Bernstein, 2000). To further analyse this aspect of teachers' sense-making, or re-contextualising of their roles and contributions, categories of teacher-leadership and relationships with organisational change, from teacher-leadership

literature, were used as analytical concepts. The diagram below illustrates the organising ideas for analysis of the data.

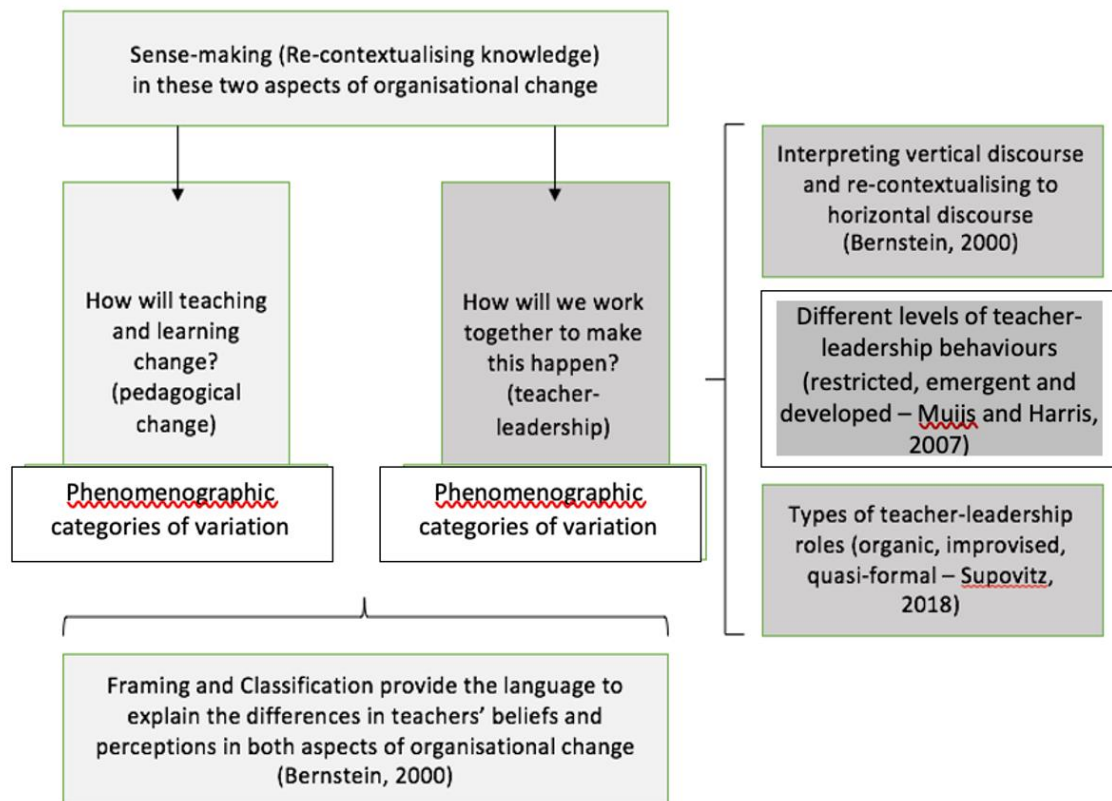


Figure 3.1: Organising ideas for analytical framework

Furthermore, as teachers' conceptualisations of their roles and contributions during the change process shifted and altered along with their experiences, a model developed by Luttenberg et al (2013) was used to map different ways in which teachers evaluated and engaged with the organisational change process over the 18-month period of data collection. By tracking the ways in which the variety of teachers' perspectives of two aspects of organisational change match against their expectations, it makes visible the ways in which sense-making takes place at different times and for different elements of the change experience. Teachers' feelings of enchantment or disenchantment with change processes is

in this way elaborated in more detail than simply implying agreement or disagreement with change.

A snap-shot view of the model by Luttenberg et al (2013), is as follows:

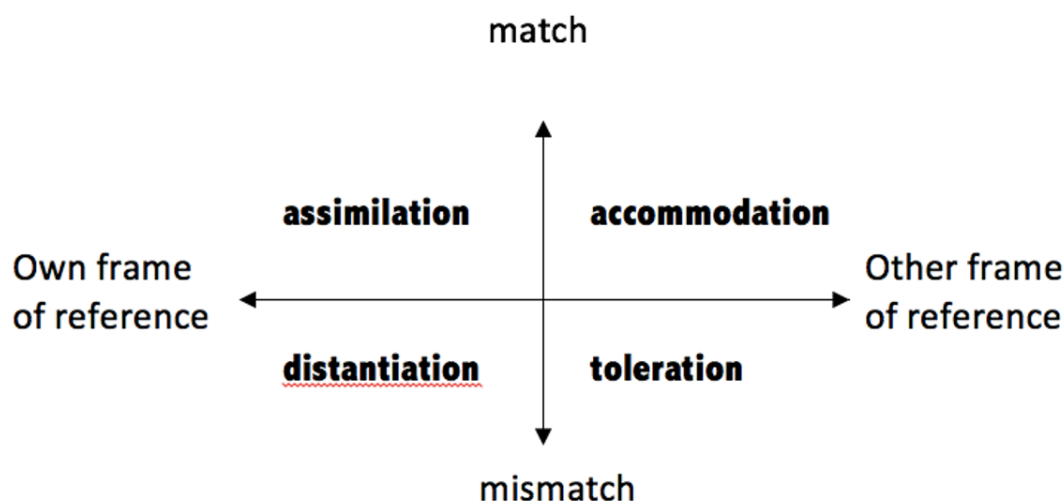


Figure 3.2: The two dimensions and four types of teachers' search for meaning of organisational change (Luttenberg et al, 2013)

A more detailed elaboration of each analytical concepts and the model presented above are explained in the following sections.

3.2 Analysis of sense-making of changes in pedagogical practice towards personalised education

I decided to use Basil Bernstein's concepts of *re-contextualisation* of knowledge, *framing* of teaching-learning relationships and *classification* of curriculum as these are useful analytical concepts and language for describing ideas presented in pedagogical shifts towards personalisation of education. While I acknowledge the wider applications of these concepts to understand power relations and social inequality in education, for my purposes in this

research, I restricted the use of these concepts to explain distinguishing features of teachers' perspectives about what they valued in personalised education. Using these concepts as heuristic tools helps to look beyond agreement and disagreement and gain a more nuanced perspective of where teachers' understandings and intentions overlap or conflict with one another.

Framing refers to different types of teacher-learning interactions and is described by levels of strength. Weaker framing allows for a more free-flowing interaction of activities and social behaviours with students utilising more choice. The weaker the framing, the more opportunities provided by the teacher for students to lead their own pace and make decisions about the direction of their learning. Strong framing involves a much more teacher-centred approach to defining activities and the way that time and communication is managed within a learning situation. To illustrate the impact of framing, Pandraud (2001) describes teachers who adapt their framing, even when teaching the same lesson, with different groups in order to achieve learning objectives in different ways. By altering the level of discussion and guidance provided, to suit the groups of students, Pandraud observed tacit behaviours from teachers who responded to students in ways that best caught their attention for learning. In this way, teachers may choose a weaker form of framing to allocate more power to students for controlling what is learnt and how. Also, weaker framing allows more opportunities for individual creativity of expression beyond the direct instruction of a teacher. A stronger framing, on the other hand, where the pacing of activities and guidance for what is to be done is led more firmly by the teacher, there are benefits of ensuring that certain activities and ideas are covered in the learning process.

Classification refers to the strength of boundaries around the content of what is to be learnt. In a school context, strong classification of curricula usually refers to a firm content knowledge-base in a discipline, but could also refer to a clearly defined skill or standardised assessments. In these cases, the sequence and content of what is learnt could be described as 'visible' to the student (Mangez and Mangez, 2011). Weak classification, then refers to content knowledge with blurred boundaries which include inter-disciplinary subjects and any form of curriculum that is co-constructed in substance. Here, an emphasis may be placed on the application of knowledge or problem-based structures of curricula (Bernstein, 2000) rather than the discipline itself. While the explicit content being taught may be described as 'invisible' to a student, this type of classification, particularly when coupled with weak framing, can make visible to the teacher many student attributes of personality and creativity that might otherwise be hidden in a strongly classified curriculum structure (Mangez and Mangez, 2011). In an interesting form of directing the classification of curriculum, the government for French community in Belgium made it illegal to teach conjugation of tables in mathematics unless it was done in the inter-disciplinary context of reading and comprehension. This example demonstrates ways in which governing bodies have, at times, participating in the weakening of classification as a way to add purpose or context to mathematics (Mangez and Mangez, 2011, p163)

The classification and framing within a pedagogical model provide explanatory language to discuss the ways in which knowledge is re-contextualised from wider discourses of education to pedagogical practice. At the same time, classification and framing shape consciousness and identities (Stavrou, 2011) and therefore can provide an analytical view of teachers' sense-making of pedagogical practice. During times of pedagogical changes,

teachers who are developing curriculum within schools are working towards what Bernstein (2000) would describe as 'de-contextualising knowledge' from one origin and 're-contextualising' the knowledge in a new context. For teachers in this research, this re-contextualisation of knowledge is considered a central aspect of their sense-making process during the period of organisational change.

3.3 Analysing teachers' sense-making of their own roles and contributions within the organisational change process

The concepts of framing and classification can also be used to describe the types of structures and behaviours that were put in place by senior leaders to create both the vision and process of change. Structures and systems that are put in place in an organisation, which actors are meant to explicitly know about, shape work-life and what Bernstein (2000) describes as *vertical discourse of knowledge*. Continuing with the application of Bernstein's ideas of re-contextualisation, the nature of horizontal discourse of knowledge is very relevant as it applies to tacit, common-sense, fluid and less systematic types of knowledge that is often applied at a micro-level of work interactions. Applying the concepts of *vertical* and *horizontal* knowledge within organisations can provide insight into the challenges faced by teachers who are trying to negotiate their understanding of their roles in the L21 process while also translating this into their activities and communications in day-to-day work with students and colleagues. Willis et al (2019) discuss how middle-leaders in Australia, adjusting to the role of mentoring beginning teachers, had to enter schools, make sense of vertical knowledge systems and translate them into workable horizontal knowledge. In the examples presented, they illustrate some of the challenges of 'messy work of re-contextualising' (p334), balancing many roles and navigating the different priorities and

values that are reflected in social interactions. Similarly, in the research presented in this thesis, an analysis was carried out of how teachers had to re-contextualise the knowledge of what the pedagogical change was about and also make sense of the ways in which teachers were meant to lead change. Reconciling what needs to be done, through the socialised and fluid form of horizontal discourse, with that of vertical discourse of knowledge, can be considered a critical part of making sense of organisational change. The concepts in the analytical framework aims to draw connections between teachers' sense-making and the 'specialized symbolic structures of explicit knowledge' (Bernstein, 2000, p160) of vertical discourses that encompass the school change vision.

Making sense of one's role in new structures and systems of a school can include how one determines ways to be a resource to others (Hunzicker, 2017) and this is an example of re-contextualising vertical discourse to horizontal. This conceptualisation of one's professional role and contribution is often responsive to the perceived needs of others and the prevailing culture of a school (Poekhart et al, 2016). This includes the ways in which a teacher uses their 'insider status' (Supovitz, 2018 p.56) as a way to identify areas for improvement in schools and nurture or influence others. However, depending on their 'stance' as teacher-leaders (Hunzicker, 2017), which can be described as the dispositions, values and beliefs that guide action - teachers may be restricted by their predisposed views about the scope of their work. Alternatively, they may expect to have a larger impact on wider aspects of the organisation than can be immediately supported by the organisation's prevailing channels of sharing and communication. Provided with an open invitation to initiate change within school practices, it requires an appropriate teacher-leadership stance and an active choice

for teachers to position themselves to take control and be “policy makers rather than just policy takers” (Gunter, 2004; p. 38).

With this premise, two conceptual frameworks will be used to discuss ways in which teachers-leaders’ roles may manifest in schools. Teachers’ sense-making as well as organisational structures that support teacher-leadership are important factors determining these examples. The first is three models described by Muijs and Harris (2007) that provide a basis for analysing the level of restriction or empowerment that emerge for teacher leadership within a school culture. The second is Supovitz’s (2018) three paradigms of teacher leadership which provide an analytical framework for how teacher leadership has varying degrees of legitimacy and authority within an otherwise hierarchical school leadership structure.

Through case studies, Muijs and Harris (2007) demonstrate what they describe as high, medium and low levels of teacher leadership, and that this relates to a number of factors that can empower or hinder the proliferation of teacher leadership beyond the classroom. Arguing that “leadership is a fluid and emergent rather than a fixed phenomenon” (p113) the authors explain that shared cultural norms for social behaviour determine the extent to which contributing to strategic and systemic change beyond one’s official positional remit seems possible. Their case studies show that the level of trust and support demonstrated by senior leaders within the school culture are key factors that enable teachers to suggest and lead areas for improvement. In these cases, the boundaries between roles and hierarchies may blur given specific circumstances of work contexts.

Muijs and Harris (2007) consider three ways to describe the ways that teachers are positioned as teacher-leaders within school. At the most *restricted* level of leadership, teachers are compliant-based and attempt to follow the most direct messages to meet basic contractual commitments, in a way that is less about innovation and more about following rules. The *emergent* form of leadership is more adaptive to situations, providing reflection and innovation in certain areas and consulted by senior leaders for specific issues, often beyond a teacher's immediate classroom environment. The third form, *developed* teacher-leadership, refers to more contributions that build capacity within the school by identifying problems and solutions, changing cultural norms through a teacher's personal influence.

These three types of teacher leadership (Muijs and Harris, 2007) are presented below along with a brief analytical description using the concepts of classification and framing (Bernstein, 2000).

Table 3.1:
Muijs and Harris (2007) categories analysed through the lens of classification and framing (Bernstein, 2000)

Different types of teacher leadership described by Muijs and Harris (2007)	Key features of the type of leadership
Restricted	Initiatives are limited to following direct instruction from senior leaders, generally with string framing and classification of roles.
Emergent	Middle managers, who are teacher-leaders, are encouraged to take initiatives. Teachers may feel they are consulted on some decisions. The framing of leader-follower relationships are weaker here.

Developed	<p>Strong expectation that teachers will lead areas of improvement with some level of accountability. Decision-making can be initiated by senior-leaders, middle-leaders or teachers. Teacher-led initiatives for school-wide changes are supported. Training and coaching may be provided to support specific aspects of teacher leadership.</p> <p>Senior leaders provide moral support to take initiatives and take risks. Shared culture of mutual responsibility and trust.</p> <p>While framing of leader-follower relationships is weaker here, there may be clear roles for individuals (stronger classification of roles), which has been seen as supportive of a developed teacher-leadership environment (Muijs and Harris, 2007)</p>
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Supovitz (2018) suggests, with reference to the research by Muijs and Harris (2007) *inter alia*, that even in a school environment where a *developed* teacher leadership culture prevails, much of the expertise among professionals is still restricted by beliefs about positional hierarchy in organisations and the role teacher-leaders play among their peers. He explains that much of teacher leadership is understood as shared responsibility and acts of collaboration, regardless of whether one has a formal positional role. In this *organic* paradigm, a teacher may initiate and lead an area of pedagogical discussion or decision-making and that this is likely to be seen as a cultural norm and mutual decision-making among peers can take place as a normative form of teacher-led action. In the cases of *improvised* and *quasi-formal* teacher leadership, the author describes positions of teacher leadership, often with a title and in some cases with a stipend or time-released associated with it. While the latter is integrated into school structure and systems, the former is not and therefore teachers need to assess the way in which they can contribute to the prevailing structures within the school. In both these cases, the author discusses case-studies where teacher leaders have supported and coached their peers and learning programmes and yet have not had the authority to provide strong instructional directives. For example, one case study illustrated how the normative view that peer-culture among

teachers is non-confrontational and collegial led some teacher-leaders to feel reluctant to visit and assess another teacher's lessons. While demonstrating through example or by sharing resources was seen to be a common strategy of teacher-leaders, the author concluded that since direct, hard feedback is often seen as beyond the remit of a teacher-leader, the full potential of these teacher leaders could not be enacted through these models of limited authority. A combination of *improvised* and *quasi-formal* teacher-leadership models were prevalent in the case-study school of the research presented in this thesis.

Table 3.2:
Teacher-leadership paradigms (Supovitz, 2018)

Dominant paradigms of teacher leadership focused on instructional improvement (Supovitz, 2018)	Key features of the type of leadership
Organic teacher leadership	Acts of situated leadership that are not reliant on formal positional responsibility. Reliant on shared expectations of collaboration among peers. This types of leadership emerges through a strong sense of collective responsibility to get done what is perceived as necessary
Improvised teacher leadership	Positional responsibility created in schools, often associated with stipends or time release. Not built into school structure. Teachers must assess the prevailing culture and how they can contribute within.
Quasi-formal teacher leadership	Position responsibility created within the school structure. The position has legitimacy but not authority over peers.

Some of the constraints in teacher leadership described by Muijs and Harris (2007) and Supovitz (2018) are also explained in literature elsewhere. Hunzicker (2017) asserts that both an “overly rigid” or “overly loose” school culture (p 6-7) can restrict teacher leadership. In the case of an overly rigid structure, echoing Muijs and Harris’s (2007) notion of *restricted*

teacher leadership, the expectation that decisions are initiated and completed entirely in a top-down structure sets the scene for teachers to conform and comply. In a case-study example, the author describes how the professional judgement of teachers can be devalued in a rigid structure where channels of hierarchy are created based on longevity of service rather than the potential to contribute. Following Bernstein's (2000) terms, we can also describe this form of organisational power-relationship as strongly framed with strong classification of expectations. On the other hand, by an overly loose school culture, Hunzicker (2017) refers to situations where teachers are empowered to initiate change at grass-root level, however, and yet there may few processes for accountability or for legitimising their work for long-term sustainability. In an overly loose school culture such as this, expectations of teachers' roles and the school vision may be vague, reliant on teachers' own definition of success, and therefore discouraging to teachers. Therefore, even in a school culture that encourages a *developed* teacher leadership (Muijs and Harris, 2007), teachers can be hindered by the very process that seeks to provide opportunity for them. By analysing teachers' sense-making narratives as they negotiate their roles in teacher-leadership, times when this hindrance occurs can be highlighted, suggesting times for additional clarification from senior leaders.

3.4 Mapping teachers' expectations and evaluations of the organisational change process

As part of the second stage of analysis of interview data, a framework that was previously used by Luttenberg et al (2013) was used to track the ways in which teachers' engagement with the organisational change can be described and how it altered over time. The variations of perspectives drawn from the phenomenographic categories provided insights

into how teachers' expectations matched their experiences of change over the 18-month period of data collection and this provides an additional layer of analysis of the sense-making process.

For a holistic view of teacher engagement with the change processes, interview data was applied to a framework that was previously used by Luttenberg et al (2013) to map teachers' schema or frames of references to compare expectations and experiences. The framework demonstrates how teachers' search for meaning aims to provide a cognitive connection between previous, current and future work. As teachers redefine their roles and their work-place, this search for meaning and frames of reference tend to shift in a dynamic process.

The two-axis framework demonstrates four ways in which teachers search for meaning during organisational change. In this model, following the work of Luttenberg et al (2013), the search for meaning is illustrated through the relationships between a) participants' existing/prior frame of reference, b) the perceived frame of reference of the policy change and c) a match with the perceived ideal frame of reference.

The frames of reference are the participants' narratives that bring legitimacy and coherence to policy elements (Coburn, 2005). In related literature, Coburn (2005) discusses a causal link between the cognitive act of sense-making, to bring legitimacy and coherence to policy elements for teachers, and policy enactment. With a more integrative perspective of how sense-making occurs during teachers' interpretations of change policy, Luttenberg et al (2013), considers policy enactment and sense-making to be inseparable entities. The model

presented here therefore integrates sense-making into the dynamic concept of school reform activity. This model provides a visual framework that can be used to map the sense-making of an individual or group in terms of whether personal frames of reference match expectations and actualisation of policy enactment.

The model shown previously as figure 3.2 is presented here again.

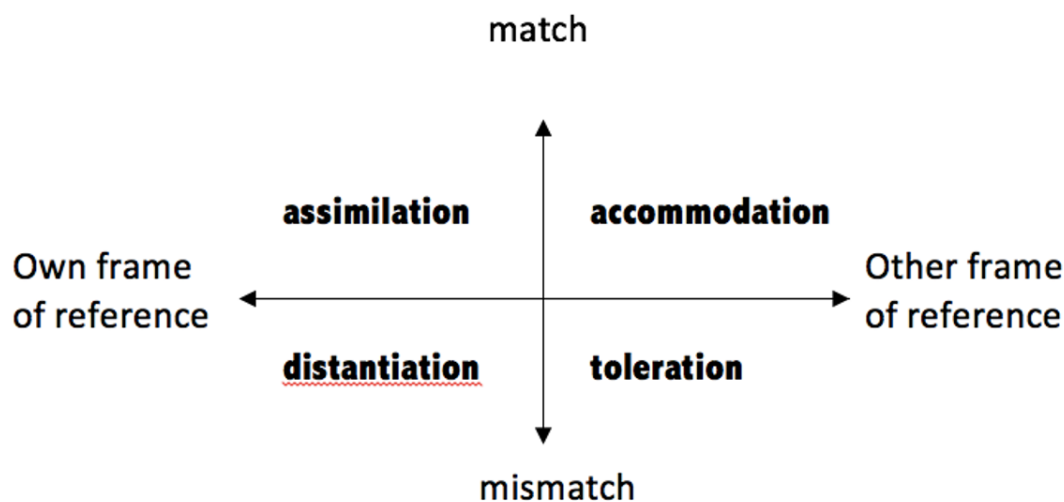


Figure 3.2: The two dimensions and four types of teachers' search for meaning of organisational change (Luttenberg et al, 2013)

In the two-axes framework for mapping the sense-making of reform, the horizontal axis considers the extent of match between prior and new frames of reference, and the vertical axis considers how well the perceived changes match the participants' ideal of what would be effective change.

The two quadrants above the horizontal axis could be interpreted as "agreement" and below the axis could be interpreted as "resistance". The participants' frames of reference

are expected to shift and change because policy messages adapt over time (Fullan, 2007) and also, as actors participate in the sense-making processes, their frames of reference are likely to adapt too (Luttenberg et al, 2013). Participants may also position their sense-making in different quadrants for different things. A critical idea here is that when a participant appears, at first to be in “agreement or resistance” (ibid, p.289) to the reform, an analysis through the lens of “search for meaning” (ibid) or sense-making (Spillane et al, 2002; Coburn, 2005) can reveal an alternative to this dichotomy.

As explained by Spillane et al (2002), during organizational policy change that involves pedagogical shifts, prior experience and expertise of teachers determines the frames of reference and mental models upon which they develop new understandings. Limited expertise in one area, then, may lead to limited understanding of change directives in the same area. On the other hand, prior experience may lead to a clear understanding but disagreement with aspects of the intended changes. In some cases, a teacher may believe they have understood the nature of change whereas they may have made sense of just a part of it. A summary of each quadrant, as explained by Luttenberg et al (2013) and drawing from cognitive sense-making theory (Spillane et al, 2002) and organisational change theory (Coburn, 2005), is explained as follows.

The upper-left quadrant is called ***accommodation***, which is a term used by Piaget to describe a way of bringing new concepts into a known framework (Coburn, 2005). In this case, teachers are integrating new ideas into existing practices. As a result, some practices may change while underlying principles may not (Luttenberg et al, 2013; Spillane et al, 2002). This could be because the teacher’s current practice could be, at a foundational level,

very similar to the actual intended practice. However, this could also mean that crucial elements of the change process have been misunderstood, forgotten or simply not noticed. Coburn (2005) and Spillane et al (2002) describe how much of new policy may mistakenly be imagined to be the same as before and therefore do not trigger the sense-making process. Attention may be also lean selectively toward some outcomes that are recognized as desirable (Edwards and Smith, 1996) and this can lead to sense-making and motivation in this direction at the expense of others.

The upper right hand quadrant is called ***adaptation***, also a term taken from Piaget's work (Coburn, 2005). Here, the teacher is taking new ideas and adopting them at the expense of some older, more established practices. In this case, there could be a sense of trying something new, experimenting or moving forward with something one believes in and now has the opportunity to try. There could also be a sense of loss, and yet perseverance towards change.

The lower two quadrants represent teachers' positions and actions when they do not believe or agree with the change enactments (Luttenberg et al, 2013). The lower right hand quadrant, known as ***toleration***, is when new ways are followed through, but not driven by conviction. The bottom left is ***distantiation*** where a teacher avoids following new procedures or ways of teaching, as it is perceived as in misalignment with personal views, and continues with their more familiar patterns of behaviours.

When interview data for the current research presented in this thesis was tested against this model, it was clear that participants' views could be represented in one quadrant for

personalised education implementation and in a different one for the strategies employed to forward the L21 vision. Also, some participants shifted between quadrant positioning over the period of two years.

3.4.1 Strengths of this model:

In developing this two-axis framework, Luttenberg et al (2013) move beyond explaining snapshot moments of organisational sense-making, and consider how sense-making produces and reproduces shifting frames of reference. Sense-making and meaning ascribed to change is shown here as multi-layered and multi-dimensional (Luttenberg et al, 2013). This model highlights the changing positions within search for meaning and, in this way, enable the discussion of how the uncertainty of such moments may present a threat to the professional identity of the actor(s) involved (Ganon-Shilon & Sechter, 2016). It also challenges the assumption that individuals have fixed characteristics that enable or restrict change enactment.

By placing an emphasis on the mapping of changeable variations of sense-making, the model aims to maintain an openness to the validity of sense-making leading to tentative changes, challenges in communication and meaningful dissent.

3.5 Conclusion of this Chapter

The analytical framework combines features of cognitive and physical structures that impact the sense-making of teachers' work and roles during organisational change. In accordance

with the nature of the organisational change in the case study school, teachers' sense-making focused on pedagogy in their own classrooms, and the roles they and their colleagues played in shifting in wider practices in the school to enact the changes.

While the aims of a democratic approach to work may be for teacher-leadership to be emergent and to have an environment conducive to developed teacher-leadership (Muijs and Harris, 2007), the motivations that underlie a teaching profession and the structures to support these behaviours impact the ways in which teachers' assess the change process and the extent to which they assert leadership behaviours.

While the phenomenographic coding process in the first stage of analysis provide the categories of variation in how teachers experienced aspect of organisational change, the analytical framework discussed in this section aims to demonstrate the interactive nature of teachers' sense-making of their roles as teacher-leaders and the changes taking place.

Chapter 4

Methodology

4.1 Introduction

The literature review chapter explored the ways in which teachers' interpretations of organisational change processes are intricately connected with their perceptions of their own roles at work. Teachers at the case-study school were directed by senior leaders to identify and discuss issues and solutions pertaining to a broad vision of organisational change. Given the democratic approach to collaboration that was set up through teacher-led committees dedicated to organisational change, the environment was conducive to teachers' sense-making, leading to diverse subjective understandings of pedagogical shifts and professional roles. At the same time, the teachers' sense-making narratives can reveal the structures and ideas that impact their thinking and interpretations. As explained in the literature review, the overlaps and contrasts in individuals' interpretations of professional experiences tend to alter over time as organisational change progresses, and in this way, teachers' sense-making influences the ways in which the organisational change moves forward. An awareness of how teachers make sense of what they have to do and how they can assert leadership can provide a window for teacher-leaders and senior leaders to

ascertain moments where supportive guidance can help a democratic work environment to move forward with its vision for change.

Since teachers' perspectives are central, in this study, to understanding organisational change objectives, implementation through teacher-leadership and how well it progressed over time, a phenomenographic methodology was applied to data-collection and initial stages of data-analysis, since phenomenography focuses on participants' experiences of the world or how they ascribe meaning to the relationship they have with social phenomena (Collier-Reed & Ingerman, 2013). Through this technique, categories of various versions of experiences of a social phenomenon can be derived, and together, these various categories create an 'outcome space' of the phenomena (Marton & Booth, 1997). This chapter first presents the ontological and epistemological base for the methodology used for this research, including a section on phenomenography. Following this, data collection methods and the analysis procedures are explained.

4.2 Assumptions and Theoretical Approach

In social science research, there is always the question of how the central concepts or phenomena under investigation will be conceptualised. The validity of the objects of analysis and the knowledge claimed in the findings relate directly to the nature of this conceptualisation. Therefore, the theoretical underpinnings of the phenomena need to be discussed in order to explain the methodology for research.

This research follows an interpretive ontology of social realism. Social realism seeks to uncover the underlying structures that create the knowledge that is placed center-stage in

research (Maton and Moore, 2010). In this approach, knowledge is acknowledged to be re-contextualised and repackaged in society, and that what might be seen as normative ideas on the surface can be the manifestation of hidden, dominant voices within the field of study (Bernstein, 2000). Explaining social phenomena is considered to be the main objective of social realism, rather than predicting outcomes. I chose this approach as a way to acknowledge both the interpretive aspect of human interaction in society as well as the devices and structures in education that exist and impact the knowledge interpretations and behaviours of actors. Following Maton and Moore (2010), social realism developed as a way to overcome the perceived dichotomy of positivism – where knowledge is entirely autonomous, objective and validated through careful observation independent of human interpretation - and constructivism – where knowledge is entirely socially constructed with no separate existence. Therefore, in the study investigated in this thesis, the phenomena of change **are** seen to exist independently of people, although not independent of human interpretation. In alignment with these ideas, locating and describing the ideas and structures that constitute the case-study schools' organisational change processes, through the perceptions of teachers, is central to the research in this thesis. Here, through the initial stages of analysis, knowledge was found to be re-contextualised by actors in the organisation, in two aspects of organisational change - within pedagogical practices and also, in the ways in which teachers perceive their roles in relation to the processes of enactment of change. This is reflected in the first two subsidiary research questions that relate to teachers' diverse interpretations of these two aspects of change phenomena.

Sandberg (2005) argues that in research that has interpretive approaches with subjective aspects of knowledge, valid claims can be made if procedures align with the ontological and

epistemological premise. It is following Sandberg's (2005) reasoning, and often-used methodology (Sandberg, 2000), that I chose to use a phenomenography, with appropriate reflexive approaches, in conjunction with participant researcher observations, to validate my initial interpretations of the phenomena under investigation. The sense-making narratives that participants shared in semi-structured interviews were understood to reveal aspects of organisational change that held important meaning to them. While I acknowledge the selective nature of sense-making narratives, this in itself reveals the types of ideas and structures within educational discourse and the school that impacted teachers' understandings and engagement with the organisational change processes.

A broad vision of democratic approaches to personalised education and teacher-leadership were presented by senior leaders in the school and teachers were expected to use this general guidance to innovate and design new ways of teaching and learning. My approach to understanding teachers' interpretation of the work that followed was that organisational change is created through its enactment by actors rather than as a direct reproduction of the intentions of written policy statements and systems. As Fernandez et al (2008) explain, there is an 'invisible screen' between designers and implementers of reform and therefore, actors in the community of change act within their own contextual focus. Therefore, it follows that individuals and groups in an organisation carry out sense-making, both cognitively and through social activities. In the context of educational change, sense-making takes place within their work-lives, and the enactment of this sense-making is how the changes eventually come about. As various structures emerge within the work-place – such as altered scheduling, systems for reporting student progress, mandatory planning meetings – these structures lead to continued unpacking and repacking of information. This re-

contextualisation (Bernstein, 2000) of pedagogical and curricula understandings, in the case study school, occurred at both the level of classroom interactions and at the level of how teachers made sense of their roles when working outside the classroom with teacher colleagues or senior leaders. Therefore, regardless of the overall policy messages shared by senior leaders, teachers' interpretations as understood as a consequence of their experiences in their own contexts of both pedagogical work and how they find their work relationships shifting with their colleagues.

The epistemological position of this research, therefore, is that key structures of organisational change, including the changing contexts of professional work, can be understood through actors' personal experience of it, and how their interview narratives reveal areas of sense-making. This sense-making is constituted by both cognitive processing and social actions (Coburn, 2005; Spillane et al, 2002), takes place when an aspect of change is particularly noticeable to an actor and is therefore the way that they frame the changes that they experience.

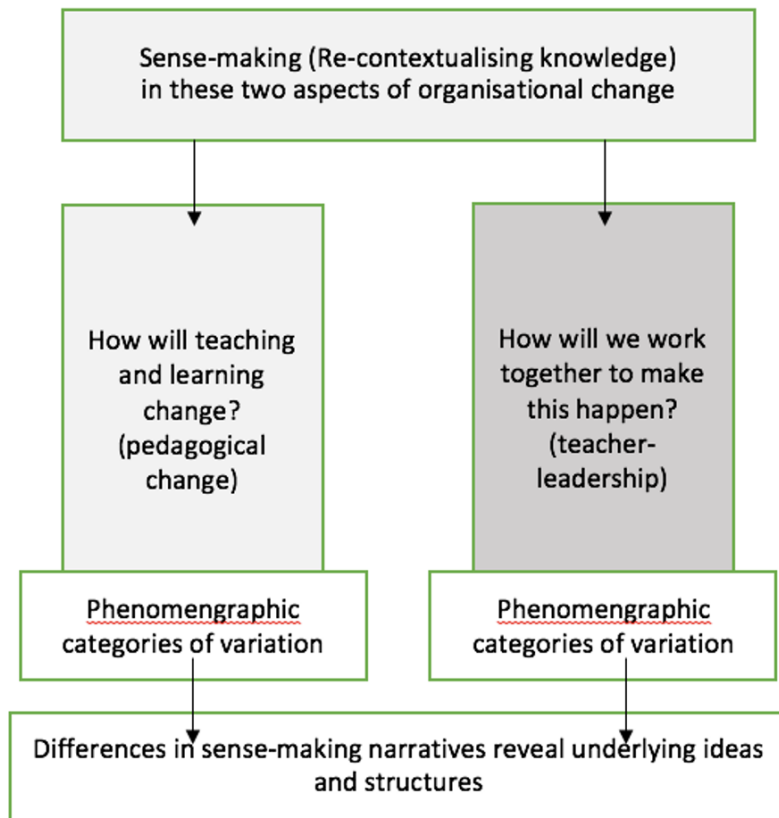


Figure 4.1: Sense-making narratives reveal underlying ideas and structures at two levels of organisational change

This relationship with personal experience of social phenomena – in this case, elements of organisational change – lends itself to phenomenographic methodology, which is a theoretical foundation for both data collection and analysis. While the participant-sampling and data-collection method used in this research is characteristic of a wider range of methodologies, it is consistent with phenomenography, and for collecting deep information about the variety of meanings that different individuals ascribe to the same phenomena (Collier-Redd & Ingerman, 2013). These variations of meaning demonstrate that teachers' participation, engagement and enactment of organisational change policies can also vary and change over time. An awareness of ideas and structures that impact their diverse sense-making can suggest moments of organisational change when teachers may need

additional direction and support, even within a relatively non-hierarchical culture of decision-making.

Following Gough and Scott (2013), a two-stage coding method was used to combine both that both *emic* and *etic* analysis. This satisfies the interests of understanding the meaning ascribed by participants internal to the research and also the validation of research by making it meaningful to an audience that is external to the research.

4.2.1 The two-stage coding process

The analysis took place in two stages of coding analysis.

For the first stage of analysis, the focus was on participants' *emic* vocabulary, drawn from semi-structured interviews which constitute the main body of research data. This aligns with the aim of the investigation which is to inquire into the perspectives of actors within the phenomena of change. Through semi-structured interviews, an interviewer can encourage in-depth reflection on the central phenomena (Collier-Reed & Ingerman, 2013) while maintain the approach of open-ended questions that allow participants to frame their narratives in ways that are meaningful to them, thus revealing critical moments of sense-making, or in phenomenographic terms, revealing their relationship with their contextual experience. Through open-coding of interview narratives, phenomenographic analysis leads to the mapping of variations in experience in the form of categories, which, when combined, are known as an "outcome space" (Marton & Booth, 1997).

Through the first stage of phenomenographic analysis, two broad areas of experience of this phenomena emerged as key areas of sense-making. These two areas were teachers'

experience of understanding the schools' pedagogical vision and teachers' experience of understanding their own contributions. Using phenomenographic methods, the variations in ways that teachers understood these aspects of organisational change were used to create *categories of variation*. As key areas of sense-making, they represent the most pertinent elements of organisational change where teachers' attention was focused.

In this process, teachers' perspectives were sorted into categories that illustrated differences in sense-making as well as revealed the underlying concepts that are both connecting threads and provide explanatory language for discussing the differences. Through this stage of phenomenographic analysis, further theoretical concepts were uncovered and, through an iterative approach. As these concepts that underpinned the differences became more apparent, further literature research led to the identification of theory to support the second stage of analysis.

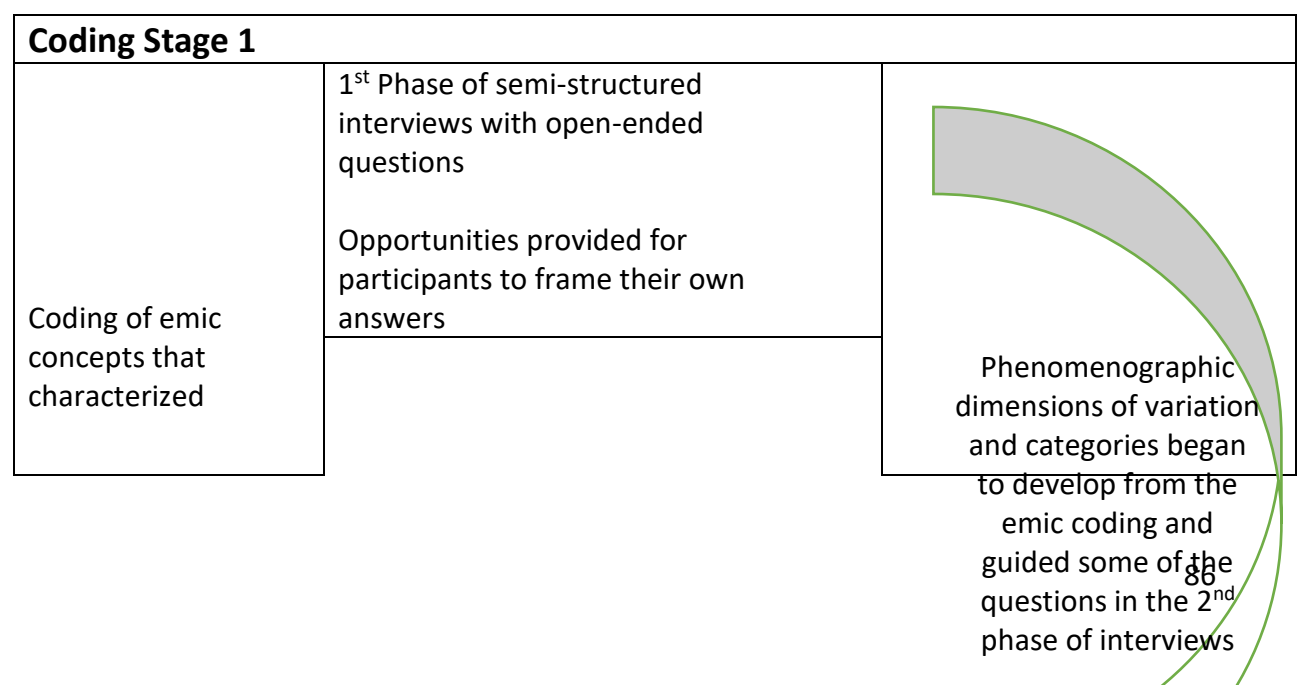
For the second stage of analysis, to connect empirical data with theory, and to explain the underlying structures that emerges as influential for sense-making, I decided to carry out another phase of coding using a framework constructed from etic concepts – these are concepts drawn from theory and literature that help to support the knowledge claims made about social systems. The phenomenographic categories guided the selection of these etic concepts, which in turn, created a richer discussion of the categories of variation. Following this, I found that teacher-leadership literature (Muijs and Harris, 2007; Supovitz, 2018) and concepts of *classification* and *framing* from Basil Bernstein's pedagogical device (2000), provided the etic concepts that provided a useful theoretical foundations for the next stage of analysis. In addition, to conceptualise teacher engagement as an aspect of sense-making, I applied the data to an analytical model previously used by Luttenberg et al (2013) to

identify the dynamic ways in which sense-making shifts and impacts teachers' relationship with organisational change. Therefore, in the second stage, theoretical concepts were used for coding the categories of variation that had emerged in the first stage. The significance of this two-stage method is that the focus remains on the perspectives and selective sense-making narratives of teachers, even while, at a later stage, theoretical codes can connect the empirical data with a wider body of literature.

It was only after the initial open-coding of interview narratives that these variations of phenomenographic categories that it was apparent to me that some concepts from Basil Bernstein's theorised pedagogical device could provide an explanatory language, as a heuristic tool, for carrying out a second stage of analysis of these categories of sense-making. Furthermore, teacher-leadership literature (Muijs and Harris, 2007; Supovitz, 2018) provided insights that supported some of the learnings about teachers' sense-making experiences of their contributions as pedagogical and curriculum leaders.

Two-stage coding process of data analysis

The analysis data took place in two stages of coding



participants' sense-making of i) pedagogical changes and ii) their own roles during the period of organisational change		
	2 nd Phase of semi-structured interviews with open-ended questions. Some opportunities were provided to revisit earlier narratives	

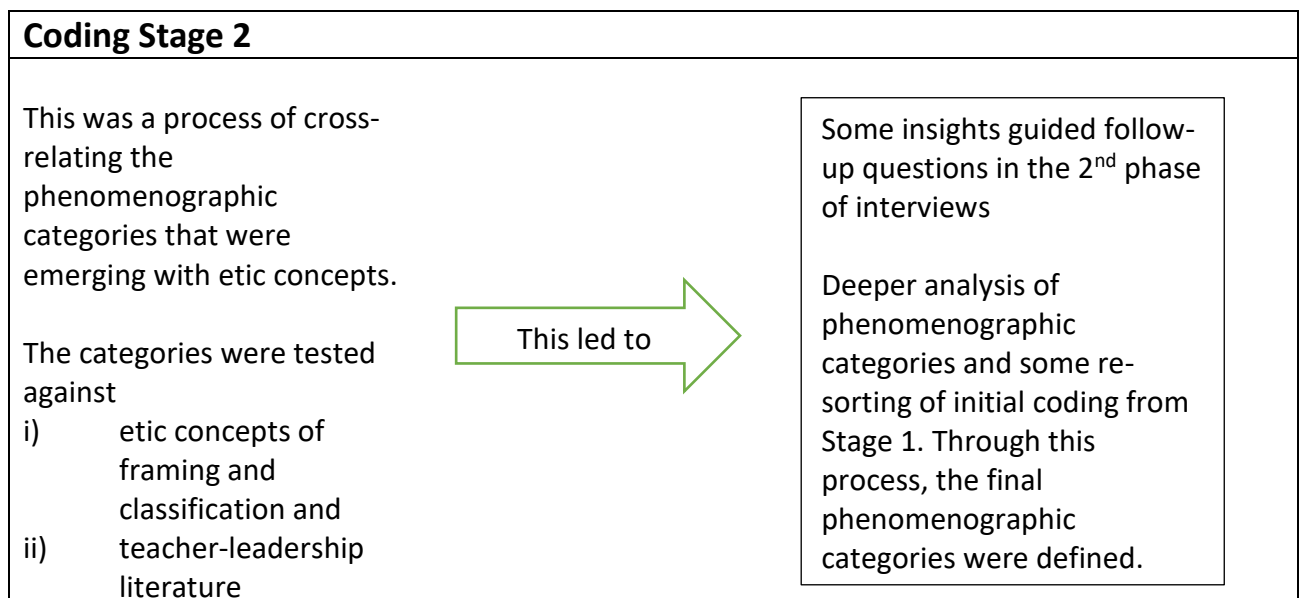


Figure 4.2: Coding stages

Examples of 2-stage coding process of analysis

Table 4.1:

Example 1

Coding Stage 1		
Interview narrative: "if you give young people genuine opportunity to genuinely shape their learning...they tend I think to...go to much more depth and..do so..into kind of things that you wouldn't predict that they would be interested in"		Emic coding : teacher providing students with voice and choice Emic coding : students can be empowered through choice and autonomy
Coding Stage 2		

The narrative reflects concepts of loose framing (teachers exert less control over students) and may involve loose classification (reduced control over the definition of what is taught)		Etic coding: loose framing can be loose classification
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Table 4.2:

Example 2

Coding Stage 1		
Interview narrative: "It feels as though the institution was the thing that is being moved forward and not any of the people in the institution. So while some of us are ready to go, we are forced to move with the framework"		<p>Emic coding: Ready and waiting for others to catch up/ being held back</p> <p>Emic coding: Lack of clarity of expectations</p>
Coding Stage 2		
The narrative conflicting expectations of teacher leadership. These expectations can be described through the leadership categories described by Muijs and Harris (2007). They can also be described through a conflict of expectations due to loose framing of leadership expectations		<p>Etic coding: Loose framing of leadership expectations This loose framing can lead to a mismatch of expectations and communication</p> <p>Teacher leadership can be described through varying levels of personal initiative</p>

4.2.2 Validity of a case-study

The validity of generalised conclusions in a context-specific case-study is a topic worthy of discussion here, as it is in all social science research. Since a case-study setting is used for the inquiry, all data and trends that emerge are contingent to this setting. While conclusions that are specific to this research are not generalisable across other case-studies, the reasons for conceptual differences in sense-making, and the nature of engagement with the change process, demonstrate patterns that can be transferable. As an example, in this thesis it was

found that some teachers at the case-study school believed that enacting the proposed pedagogical changes in the school required regular feedback from senior leaders more regularly than was practiced at the time. This example suggests both freedom and restrictions of teacher-leadership traits that can be discussed using the analytical framework. In this way, the application of theoretical ideas such as sense-making of the role of teacher-leadership and its relation to other school leaders can be seen as a transferable component of this research.

Consistent with Flyvberg's (2006) arguments, therefore, the case-study brings nuanced dimensions to sense-making theory that can enable a more expert view of what happens during organisational change. Accordingly, by placing emerging themes, based on emic responses, into heuristic frameworks that consider the dynamic interactions between the elements, I was able to recognise relationships that demonstrate the types of tensions that can arise in any school environment undergoing change of this type.

As phenomenography is the methodology used for interview method and first stages of analysis in this research, a section to thoroughly discuss its theoretical purpose follows next.

4.3 Phenomenography as a methodological approach to data collection and analysis of sense-making

The goal of phenomenography is to capture the many perceived dimensions of a phenomenon as they are experienced by a number of people (Limburg, 2008). An important distinction between phenomenology and phenomenography needs to be made here, as phenomenology focuses on the essence of meaning of a phenomenon. The current research does not claim to seek this, but instead, to investigate participants' varied experienced

understandings of the phenomenon, and this is the purpose of phenomenography (Limburg, 2008; Larsson et al, 2003).

In the field of pedagogy, phenomenography has demonstrated different ways in which students might understand the same text being read or the same instructions for mathematics (Brunstein et al, 2016; Limberg, 2008). Originated in the 1970s, this methodology was used as a way to understand the many ways in which an undergraduate student made sense of a topic being taught and this determined the way in which they would approach the associated task. Since then, phenomenography methodology has evolved beyond pedagogic research and, among other things, is used to investigate the way that workers, within organisations, understand the work that they do. In a study about anaesthetists, as an example, a phenomenographic approach has illustrated four ways that the participants, in this hospital, understood their work roles, as a central phenomenon, and how these perceptions impacted their response to work situations (Larsson et al, 2003). In this way, phenomenography provides an analytical basis for discovering the nuanced ways in which people in similar social contexts might have a very different way of experiencing things.

The research in this thesis seeks to understand the relationship that individuals form with their experiences of organisational change and the underlying ideas and structures that can explain these relationships. This echoes, to an extent, Sandberg's (2000) phenomenographic research, based at the Volvo organization, that illustrated ways in which people tend to attribute varying levels of value to different aspects of work that relate to competence. These categories of skills and knowledge had no *a priori* fixed meaning but emerged from the narratives of participants in different ways, demonstrating varying depths of

conceptualisation of what their work entailed and ultimately related to their levels of competency. Phenomenographic methods, therefore, offer an opportunity to map the different ways in which participants create their own conceptualisations at work (Limberg, 2008) and this reveals underlying influences that include previous experiences, personal values and projected expectations. An understanding of the diverse ways in which work like this is understood, therefore, can provide insight into why and how people with the same job title might carry out their work very differently.

More recently, Brunstein et al (2016) extended this use of phenomenographic methodology to discuss the various ways in which employees' conceptualisations of 'fair play' could be associated with specific competencies, thus enriching the ways in which ethical attitudes in the workplace can be understood and discussed. Applying phenomenography, here, aims to sensitise the reader to the many attitudes and beliefs that can influence work, and that individuals are less homogenous in their thinking than at first meets the eye. In both this research and the Volvo study by Sandberg (2000), the criteria for competent work is not seen as external to participants. Instead, participants' understanding of their work activities include attributes of competence and, as an entwined aspect of their experience of meaning, guide the way in which work is done. Similarly, in the research presented in this thesis, the sense-making expressed by teachers incorporates both thinking and actions as part of the same entity. It is important to make clear, here, however, that this thesis does not present research to investigate competencies of teachers as the central object or phenomenon. Instead, and it is the teachers' experienced perspectives of personalised education and their evaluation of their experience of the on-going process that are the phenomena being researched.

While, in the present research, the phenomenon of organisational change is within the locus of interest, the core object of interest are the variety of ways in which sense-making is carried out by people who are overall, arguably, experiencing the same phenomenon. Therefore, during the process of analysis, I looked for connecting threads of meaning between different narratives as well as *dimensions of variation*. *Dimensions of variation* are concepts that relate to each category of variation that emerge from phenomenographic analysis and also provide explanatory power for how perspectives in the categories differ from one another (Marton & Booth, 1997). In this thesis, sense-making is conceptualised as a form of ‘experiencing’ a phenomenon, within a socio-cognitive paradigm and this makes phenomenographic methodology an appropriate approach for eliciting the different types of interpretations made by teachers about their roles and what the school vision required them to achieve during organisational change.

4.4 Data Collection

Following the most common form of data-collection in phenomenography, data was collected through semi-structured interviews, with open-ended questions with a loose focus on the research questions. In this way opportunities were provided for participants to frame their answers in ways they saw fit, and in this way demonstrating their sense-making. As explained earlier, the first stage of analysis was then to determine the emic concepts that

characterise these narratives of meaning and through these, identify categories that illustrate the variations of interpretation.

Typically, phenomenographic data is collected through semi-structured interviews of a relatively small sample, since depth of understanding, with the opportunity of new knowledge, is of importance (Larsson, 2003) rather than attempting to develop a statistical probability of known factors. Had the purpose been the latter, one could consider collecting quantitative data, from a larger sample, with the limitation of remaining restricted to existing understandings. While a quantitative and larger sampled study can provide data for certain types of knowledge, often causal, this technical-empiricist (Codd, 1988) approach to analysing policy, and understanding the world, assumes that language is a more precise and limited vehicle for thought than is taken as a premise in this paper. In contrast, the interviews, here, allowed for the co-construction of meaning of language through the dialogue between researcher and participants to ensure that the phenomena under discussion was the same for each participant. In this way, the various meanings expressed by individuals about their experience of it were also clarified (Marton and Booth, 1997).

4.4.1 Context and Participants

The case study is set in a school that has three sections – an elementary school, a middle school and a high school. Each section has a principal, an assistant principal and a curriculum coordinator. They, along with the Whole School Director and Whole School Director of Learning, make up the academic senior leadership team. There are close to 1500 students in total and nearly 200 teachers. Many of these teachers hold additional positions of responsibility, in middle-management, as grade level leaders, heads of department and a

number of different types of pedagogical team leaders. 15 teachers were interviewed out of which 6 held such positions of responsibility. In phenomenographic studies, this has been shown to be an appropriate sample size for a saturation of data about a phenomenon (Larsson et al, 2004; Trigwell, 2000).

Interviews took place over a period of 18 months. During the first 9 months, the interviews focused on the overall impression of participants' experience of the changes taking place at school. The following 6 months coincided with a shift in strategies for change within the school where the guidance from senior leaders was that the planning for change that took place in previous years, now, were to be made actionable. 4 teachers had left the school before the second phase of interviews. All but 1 of the remaining participants agreed to a second interview. 1 participant only responded in the second phase of interviews. A diagram illustrating a detailed view of how interview phases coincided with key events is presented in a later section of this chapter.

4.4.2 Interview schedule/structure

Collier-Reed and Ingerman (2013) describe phenomenographic interviews as requiring a small number of key questions with follow-up prompts to encourage participants to reflect on a focused theme as thoroughly as possible. This way, in-depth and varied perspectives of a phenomenon can be encouraged. The terminology and frames of reference within the narratives of the participant were of primary interest, as they demonstrate the sense-making of individuals, in all their variety, taking place during the period of research.

The interviews sought to answer four open-ended questions directly associated with the research questions. (i) What does personalised education mean to you? (ii) What is your school doing to bring about personalised education? (iii) Are these processes you describe working well? and (iv) What is your role in this process?. Also, in order to bring context to participants' roles and personal context in school organisational change, I asked the additional question at the start of the interview: (v) why do you think the school chose you and why did you choose this school? These questions aimed to open up the main body of discussion, while follow-up questions such as "You mentioned X. Could you tell me more about X?" encouraged further elaboration about specific ideas that had been introduced by the participant to the interview conversation.

The categories from this first phase of interview data were instrumental in designing the follow-up interviews that took place between 10 -14 months after the first interviews. Since the purpose of the follow-up was to understand whether and how perceptions had shifted and, thereby, how sense-making had progressed, the emic categories provided the basis for asking participants their current views on selected narratives from their first interview.

4.4.3 Sampling

As is often the case for phenomenographic research (Collier-Reed and Ingerman, 2013), Participants were selected through a non-probability sampling technique to have the best opportunity for obtaining the broadest variety of meaning expressed about experiences of the organizational change phenomena. Therefore, when sampling, I considered the factors that create difference in viewpoints, such as the number of years working at the school, a spread across the three sections and also a range of opinions that had been voiced by

individuals at whole-school meetings regarding the organizational change. This type of purposive sampling can be categorized as *maximum variation sampling* (Black, 2010) as the researcher's judgement is involved in selecting the participants. A characteristic of maximum variation sampling is that a number of different techniques can be used. Therefore, the majority of participants were selected as volunteer responses to an invitation that I posted on an online faculty community communication system within the school. The invitation was placed in the weekly news-letter from each sectional Principal to encourage volunteers from all three sections. I also announced my research personally during a high school sectional meeting with an open invitation. Willing participants then responded via email and we agreed mutual times and location to meet for interview. Through my observations at whole-school and sectional meetings, I had an awareness of the types of responses and questions posed by members of faculty and my sampling therefore guided me to continue inviting participants until a point where I believed there were representatives about a variety of experiences of the change phenomenon that was central to this investigation (Patton, 1990). In two cases, I approached individuals and asked them if they would volunteer as a participant, with the aim of reaching theoretical saturation where new themes and concepts are unlikely to emerge from interview data (Lincoln and Guba, 1985; Black, 2010).

As a member of the L21 steering committee, I also sent an email to other teacher-leaders who were L21 chair-facilitators and members of the L21 steering committee and invited them to participate, in order to encourage a spread of teachers' experiences of the L21 organisational change process.

4.4.4 Phases of data collection:

The interviews were held in two phases, over an 18-month period, over two academic school years. Each academic year had key events and policy messages that were applied to all teachers in the school pertaining to the 5-year plan of organisational change (L21).

The two phases of interviews were scheduled in order to track changes in teachers' perspectives about the school vision, the ways in which they were expected to work and assert leadership and how they evaluated the progress.

Table 4.3:
Interview data-collection phases in relation to organisational change stages

Academic Year	Key events and decisions pertaining to L21
Phase 1	<p>This was the second year of L21 process</p> <p>Teachers had worked in L21 committees for year before this phase. Teachers chose an L21 committee team for the second year of L21. Some created their own working groups aligned with the L21 vision. This was part of the two-year 'planning stage' and teachers are expected to discuss the L21 targets, propose solutions and strategies for implementation across the school.</p> <p>Based on a decision made from L21 committee work the previous year, this academic year, each teacher was given the challenge of</p>

	designing a unit of teaching that included elements of the L21 vision that they did not already practice.
Phase 2	<p>This was the third year of L21</p> <p>Senior leaders described this as the first of three ‘action years’ for the L21 process.</p> <p>A flexibly scheduled school day was introduced into the middle and high school rotating timetable. On the 9th day of this rotating timetable, students could choose from a range of lesson options, some of which focus on general study and skills e.g. ‘study time’ and ‘presentation skills’. Teachers offered sessions of their own choosing.</p> <p>Middle school used the mornings of this flexible 9th day to provide students with opportunities to follow passion projects.</p> <p>The L21 committees changed in focus and, this year, were based on actionable topics e.g. teacher evaluation process; Science curriculum review; flexible learning spaces.</p>

Phase 1 Interviews: These interviews were held during the second year of L21

implementation. The participants had all worked at the school the previous year, which is when the L21 targets had been introduced and teachers had been allocated committees in which they were asked to ‘unpack’ the targets and to make decisions about further exploration. Teachers worked in these committees alongside other teachers from all three sections of the school. The second year of L21, which is the year of Phase 1 interviews for the current research, a key decision from year 1 was to be implemented which was that every teacher would participate in designing and carrying out a unit of learning that implements a target that they had not used before. An overarching steering committee met once a month, comprising senior leaders of the school and the chairs of each committee.

Phase 2 Interviews: These interviews were held during the third year of L21 implementation. There were new committees, different from the previous years, and created by senior leaders, focused on actionable areas of work such as “Science curriculum”, “Teacher evaluation committee”, “Professional Development committee”. The committees were made up of teachers from three sections of the school. The steering committee was smaller and had fewer volunteer chairs of committees as members.

4.4.5 Additional data collection

I collected the interview data with the awareness of being a participant researcher, as I was a teacher at the school throughout the time of data-collection. In addition, I carried out systematic record-keeping of key events where organisational change messages were shared by school leaders to teachers. I also made note of publicly available explanations of policy messages that were on the school website and leaflets. The aim, here, was to provide a background and to the setting within which the interview data was collected and in this way provide context to the analysis of interview data. This issues of bias in data-collection, as a participant-researcher, as well as interpretation are addressed within the discussions throughout the following sections of this chapter on methodology.

4.5 Ethics

I referred to the British Educational Research Association (BERA) for ethical guidelines before and throughout the duration of this research. The research stage began after submitting documentation outlining the ethical implications of my methods to The University of Bath and receiving approval. I also consulted with my supervisor about aspects of confidentiality and ethical behaviours throughout the process of research.

I invited teachers to participate in the study through open invitation, using the internal online bulletin system and by making announcements in staff meetings. In each case, I explained that I would maintain confidentiality by generalising themes and not highlighting the roles of people who made specific quotes. I also explained that participants could withdraw their comments or decline to participate at any time without explanation.

I was allowed access by senior leaders to meeting rooms and permission to interview during school hours. In this way, participants were able to choose whether to be interviewed on school premises or outside the school. All participants chose to meet for interviews on the school premises.

As a participant researcher, there were aspects of reflexivity to consider, as I interviewed my work-colleagues. Some of the ways in which I tackled this are in the next section.

4.6 Addressing reflexivity through interview technique

In this research, as I, the researcher, was also a member of the teaching community, participating in the process of organisational change, I was in a position of easy access and trust within the participant body. Being a participant researcher also raises questions of

subjective interpretation and the need for reflexivity. Some of these issues are addressed in this section.

In most cases of phenomenographic research, data is collected through semi-structured interviews, carefully planned as a means for interviewees to think beyond superficial answers and to express, in their own way, how they experience the phenomenon (Limberg, 2008). When considering the validity of interviews planned this way, we need to consider whether or not terminology and overall narratives are shared in ways that are mutually understood (Collier and Ingerman, 2013). Another important consideration is whether the researcher maintains an awareness of participant and researcher biases (Alvesson, 2003; Sandberg, 2005). There are several approaches that were employed during the interview process to address these issues. These approaches are derived largely from discussions about validity in phenomenographic research by Sandberg, (2005), Collier-Reed and Ingerman (2013) and Alvesson (2003).

Sandberg (2005) describes variations of epoche for interpretive research where the researcher maintains an awareness that previous experiences of both the researcher and participants are part of the lived experience being recorded as data-collection, even if the data is focused on current experience. Maintaining an interpretive awareness involves, therefore, a systematic awareness of subjective responses and interpretations throughout the process with checks and balances to challenge taken-for granted frameworks of thinking. Following the steps suggested by Sandberg (2005), I tried to maintain a sense of orientation of how the object of research appears during the process of data-collection. In

this case the objects of research are the phenomena specified in the research questions.

This supported the *communicative validity* (Sandberg, 2005), which is described next.

As mentioned above, the interactions between interviewer and participant took the form of discussion to fulfil *communicative validity*, which is a process to increase clarity and fair representation through communication. Since language does not directly mirror the ideas and concepts that a participant intends to convey, there is a need to create sufficient opportunities for communication forms, in an interview, to cover these ideas through the elaborations and nuances within the narrative. In order to achieve truthful representations, therefore, there is an inter-subjective understanding that needs to be reached between researcher and participant (Apel, 1972; Sandberg, 2005). Here, the position is taken that one's ideas and perspectives of the world are negotiated through dialogues and shared inter-subjectivity (Gadamer 1994) rather than "ready-made" (Giorgi, 1992). Collier and Ingerman (2013), following Marton and Booth (1997) explain the critical importance of the interaction between the researcher and participant in establishing this common understanding by jointly constructing its clarity of meaning. With this intention, I explained to each participant, before the interview, that I was interested in understanding their thoughts about the current changes taking place in their school. Then, the interviews were carried out in the form of a dialogue, with some fixed questions and many follow-up questions to ensure that participants' narratives continued to identify and explain the experiences relevant to the research. So, follow-up questions included "what do you mean by that?" and "could you tell me more about that experience".

To present an example of communicative validity, a participant in this research, who described their role as “loosening of of the rope – to use a crude cowboy analogy”. As they a L21 chair-facilitator, like myself, they initially ended the description of their role with this analogy, probably assuming that I knew what was meant meant, as we may have shared common experiences. To avoid this assumption, I asked “That’s an interesting analogy. Could you tell me more about that?”. They then described their perspective of the role of an L21 chair-facilitator, which is that during L21 meetings, they should remain in charge of managing the group discussion, while maintaining the norms of open discussion within the parameters of time and topic-management. This was different from my initial understanding of the analogy, which I had understood to mean the relationship that teachers had with students and a wider range of colleagues.

Before the interview process began, following Sandberg (2005), I developed a few broad, open-ended questions that provided a pathway of steps that anchored the interview discussions to the research questions. By having very few key questions as a scaffold, it was possible to retained a focus on the research questions, while encouraging participants to clarify, delve deeper or continue into other exploratory pathways of discussion. In this way, while the participant could expand their narratives with their perspectives in ways that they saw fit, I had a planned framework to cross-check responses with the central focus of the research and ensure that the discussions aligned with its aims.

Sandberg (2005) describes a way to cross-check whether a participant means what they claim to believe, and in this way, support the reliability of meaning derived from the narratives. This can be done by asking questions about the same topic in different ways

(Larsson et al, 2003), offering a different way of thinking or expressing views – using “what” and “how”, rather than “why”, to remain focused on the topic - and noting the response. This broadens the opportunities for participants to express their thoughts in ways that augment, validate or contradict their own narratives or that of others. As an example, a teacher who expressed the need to plan open-ended, creative activities in elementary school classrooms expressed conflicting statements about their own children in middle school. Here, they mentioned concerns about learning being both too teacher-led, while also being open-ended. Further discussion, using the “what” and “how” method of questioning elicited a more nuanced response about mathematics:

“My kids say they can’t know what they don’t know and so they don’t know what to do. At the same time, I can see that teachers are focusing on a structure of mastery rather than an approach that is developmental...the emotional side of learning seems to be ignored.”

This technique of interviewing, therefore, enabled deeper underlying ideas to emerge beyond that of agreement or disagreement with changes taking place in the organisation

4.7 Analysis

As explained earlier, the analysis of the interview data took place in, broadly, two stages, although the iterative nature of working with data and theory, in many ways, created a process with several steps. When analysing qualitative data, the nature of analysis steps depend on the purpose of the data and also the extent to which the researcher intends to seek new meaning that may emerge and disrupt *a priori* assumptions. The research presented in this thesis was designed, not to explore a causal relationship between

concepts, but rather to explore the nature of educators' experience of chosen educational concepts and to discover which aspects of change created sufficient disruption to the status quo to lead to sense-making narratives. Therefore, the elaborations and disruptions of meaning generated by educators were paramount to the collection and analysis of data. Therefore, nuanced differences in perspective were central to finding out the beliefs, values, ideas and structures of organisational change that impacted teachers' ongoing sense-making and engagement with change.

4.7.1 First stage of analysis

Seeking connections between aspects of existing theory – with etic concepts in mind - from the start of the analysis process can limit the scope of what emerges from the data and increase the impact of researcher bias (Miles & Huberman, 1994). With this in mind, following Gough and Scott (2010), I put theory aside at first and focused on emic aspects of data, before considering the etic connections with wider elements of the field of theory during the second stage of analysis. In a two-stage coding process, Gough and Scott (2010) describe a procedure where data from each interviewed participant in qualitative research is first coded in the form of branching nodes that represent ideas that have a network of connections. Categories of code can then emerge from the data within the context of the narrative in question.

The data generated was contingent to the questions asked in the interviews, however the questions had been designed to be open-ended with enough ambiguity to allow varied and rich meanings to be interpreted and constructed by participants. Therefore, by focusing on

As is the purpose of phenomenography, the *dimensions of variation* of meaning provide an analytical basis for creating categories that do not condense participants' ideas into generalised summaries (Beaulieu, 2017) within pre-supposed *etic* concepts. During this stage of clustering of concepts, the *emic* concepts elicited from the interview data provided the basis of broad categories of variation that, by design (Dahlin, 2007), show variation of meaning within the phenomena.

Sandberg (2005) describes the use of intentionality in systematic phases when reading the transcribed interview data. Following this system, I read the narratives with the intention of identifying what the individuals' experience as reality and then, in the next reading, I focused on how they experience this reality. In addition, I attempted to treat all aspects of participants' experience as equal (Sandberg, 2005), at least at the initial stages of reading, rather than allow myself to give greater importance to areas that I found to be particularly thought-provoking. This critical difference in reading focus was a way of grounding my own interpretations in the data itself rather than on my expectations. The clusters of codes, then were tabulated electronically in a way that allowed for regular shifting and re-clustering, as the reading process continued.

It is an important point to note that coding in itself is not analysis (Coffey & Atkinson, 1996), although, used in this way it is part of the early stages of analysis. Once the tentative interpretations were established in clusters and connections, the "stability of interpretation" (Sandberg, 2005) needed to be checked. As a form of reflexivity and awareness of biases that guide participants' narratives, Alvesson (2003) proposes metaphors for interviews that provide varied lenses for a researcher to consider multiple

angles of what is being said. In this way, multiple perspectives of participants' narratives and focus of discussions can be considered.

I considered each metaphor at a time, during each re-reading of interview data, attempting to maintain an awareness of them while organising coded clusters from the first stage of analysis. In my writing and re-reading of interview transcripts, I considered different ways of viewing the interview process and this enabled the emergent patterns to transform over time. Some categories, therefore, changed, merged or were removed.

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Two relevant metaphors were that a) interview narratives can contain moral storytelling and b) participants can apply a cultural script, assuming common knowledge (Alvesson, 2003). As it so happened, some teachers appeared to make the assumption that I understood certain institutional terms the same way that they did and I needed to retain an awareness that I, too, have been carrying out sense-making as a participant researcher. Following Alvesson (2003), I did not consider these biases within participants' narratives to be a limitation, but rather support the theoretical supposition that having conceptual awareness of how these biases operate within an interview, I was able to carry out a systematic process of reflexive interviewing and reading of interview data.

These different ways of interpreting statements and vocabulary led to a richer reading of the data and altered some phenomenographic categories of variation. For example, initially, I considered teachers' sense-making of personalised education to have categories that were separated by their focus on either teachers or learners. After considering the different metaphors, my reading was sensitised to other ways in which participants constructed

ideas, the categories shifted and I recognised that every category involved the relationship between teachers and learners, the difference was the *framing* of this relationship. This was a key moment in the process of analysis, where the *dimensions of variation* that guided the categories were identified.

4.7.2 Second stage of analysis

As mentioned in the previous section, the process of open-coding, and seeking out differences in the way that participants related to the phenomena, led to identifying dimensions of variation. By cross-relating the phenomenographic categories with the etic concepts of *framing* and *classification* (Bernstein, 2000), I tested the relevance of using these concepts to discuss the types of sense-making narratives expressed by teachers, which were expressions of areas of organisational change that were most noticeable to them. At this point of the analysis process, it could be said that the relationship between emic and etic concepts began to co-evolve because the ideas upon which the research questions had been generated began to play a role in the analytical processing of meaning. The teacher-leadership concepts in the analytical framework were also used as coding devices for this stage of analysis. Gough and Scott (2010) inter alia describe how coding categories and analysis develop together as meaning continues to emerge during the process of qualitative coding.

Gough and Scott (2010) describe 'coding' and 'analysis' to be related along the same etic-emic axis (p 349). At this stage, I tested different ways to organise emic data by cross-tabulating code clusters against other theoretical concepts that emerged, from the interview-data.

The next stage was to cross-tabulate the categories with concepts discussed in the literature review and connected more specifically with the research questions. This is the etic stage that allows a stronger connection with existing theory and allows a more direct comparison with research from previous literature (Scott and Gough, 2013). Some of this took place before the second interviews and some took place after. The process of coding and categorising data was therefore iterative with the process of collection of the second round of data and neither were in isolation of each other. From this process, the concepts involved in the analytical framework were identified, as relevant to the sense-making narratives, with explanatory power for connecting underlying systems and structures with teachers' perspectives.

4.8 Applying a model developed by Luttenberg et al (2013)

One of the purposes of this research is to see beyond superficial ideas of teachers' agreement or disagreement of organisational change and consider how sense-making provides an understanding of moments of dissent, enthusiasm, frustration or compliance, due to teachers' developing beliefs and perspectives.

With this in mind, Luttenberg et al's (2013) two-axis analytical model was used to identify the types of engagement teachers had with the two areas of re-contextualising their work, as identified in the interview narratives. As explained earlier, teachers expressed organisational change in terms of

- a) pedagogical shifts towards personalised education and

- b) their roles and contributions to the organisational change process

I investigated teachers' ongoing engagement with the change processes through the ways in which they made a connection between prior knowledge/expectations and what they perceive as happening within the organisational change process. This aspect of sense-making highlights how the frames of reference of individuals and groups in a school can change and alter with policy messages and experiences and this relates to the ways in which teachers respond at different stages of the change process.

Taking each interview participants' narratives at a time, I identified the quadrants of the model that best represented their sense-making, at each interview phase. In many cases, participants occupied more than one quadrant. From this, I created visual representations to map how individuals' frames of reference, responses and therefore engagement, adapted and shifted at different times during a period of change. These engagements were also discussed using the analytical framework and relate to the third subsidiary research question.

Chapter 5

The Case-Study Setting

5.1 Introduction

This chapter includes information about the school, the 5-year organisational change process called LEARNING 21 and the ways in which the organisational change vision was shared by senior leaders to teachers throughout the 18-month period of the research. Following Flyvberg (2006), This is important for the case-study data to have a context that demonstrates the application of the theoretical concepts of sense-making and the analytical framework presented in chapter 3.

As a teacher of the case-study school, I was a participant observer in my work as a researcher. I had access to the day-to-day work associated with the LEARNING 21 (L21) process and the messages shared by senior leaders about the policy vision. In order to maintain an intentional level of objectivity (Hammersley and Atkinson, 2009) while recording the cultural setting of the school organisation at the time of research, I collected notes of the experiences of key whole-school meetings and summarised some of the social behaviours and responses that constituted patterns of cultural norms during L21 committee meetings. Since the purpose of writing the following account of the setting of the case-study is to support the wider data analysis which is based on semi-structured interviews, I selected elements of information that were relevant to support the findings from the analysis of interview data. This chapter, therefore, serves the purpose of providing the background of the school setting and providing a chronology of the activities and events that provided overarching policy messages of the organisational changes envisioned by senior leaders of the school.

5.2 Context and Setting

5.2.1 The school

The case-study school is a fee-paying, non-profit, independent international school in China with, at the time of research, a mixture of 51 nationalities represented among both educators and students. The school had been set up as an international school nearly 25 years before the research, by a group of expatriate parents and educators. The school could therefore, be called a 'traditional' international school (Hayden and Thompson, 2013) comprising mostly globally mobile expatriate students and almost entirely foreign passport holders. At the time of research, the teachers and senior leaders were mainly non-Chinese (177 non-Chinese; 19 Chinese). While many members of faculty had worked at the school for over 10 years, the average retention of staff is 5 years. Within what can be called a Global Education Industry GEI) - which involves a conglomerate of school, agencies and providers of educational resources that are both drivers and supporters of the overall international education market (Bunnell, 2020) - the school is generally considered to be a successful and respected school that promotes International Baccalaureate (IB) principles of internationalism, according to authorisation and accreditation reports by external agencies such as the Council of International Schools. Accordingly, academic results at graduation, both by IB Diploma scores and entrance to universities, from this school are consistently above world averages for international schools. During the period of research, the school was visited by evaluating and accrediting agencies and a key summarising comment by the visitors from the Council of International Schools (CIS) included the comment :

"(The school promotes)...an atmosphere that fosters learning, openness, fairness and trust for all... the development of students leadership and voice, which empowers students to make a difference"

The school's positive reputation and progressive approach to pedagogy is a key reason for many of the teachers joining the school. 9 of the 15 participants commented on this being a reason for them to join. 6 of the 15 participants said that they were hired specifically for their demonstrated background of innovation in curriculum. The overall belief that the teachers had of the school is therefore of being in a forward-thinking environment where creativity of teachers and students is valued. This demonstrates a broad overall perspective of the way that senior leaders expected teachers to voice their opinions and promote creative ways of teaching and learning. As the data in this research shows, however, the ways in which teachers understood their scope of innovation – within or outside the classroom – and the extent to which they believed they needed explicit direction and validation from senior leaders, varied greatly.

5.2.2. Drivers of organisational change in an international school context

Providing students with leverage for an internationalised world is a *raison d'être* for international schools, although, with the vast range of schools (Hayden and Thompson, 2016) that fall under this banner, claims for how this will be brought about vary. An independent international schools' way of framing the ways in which their students will learn and thereby be ready for the workplace on a global platform can depend on a myriad of contexts including the constraints of curricular requirements, local values of what constitutes valid qualifications and stake-holders' demands, in particular those of the fee-paying parents. The case study school was authorised by the IB (International Baccalaureate) and as such, had the philosophical basis of curriculum that student learning will have local and global contexts as well as focusing on skills that are transferable across disciplines and foster individual inquiry among students. With considerable freedom of how

curriculum content is chosen to fit the IB K-10 framework (Hayden and Thompson, 2011), the western liberal ideologies of the school and the mostly western teachers guided what was taught to students and how (Tate, 2016). Like many international schools with the freedom to guide curriculum without the pressures of conforming to a national curriculum, the school had the approach to education that raises students to develop learning styles that represent a type of democratic liberalism – with collaboration, debate, open inquiry and student-led projects playing a large role in pedagogical practice (ibid).

In China, international schools have increased dramatically over the past two decades – from 22 in 2000 to 857 in 2019, with projected numbers of schools expected to be 1110 in 2024 (ISC Research). The majority of these schools, in line with global commodification of international education (Hayden and Thompson, 2016), serve a local population rather than a globe-trotting student body (Tate, 2016) and some are ‘satellites’ of prestigious schools in western countries. The case-study school, therefore, while well-established, has plenty of competition in a market-driven system of international education.

In keeping with its original ideology of community-centred, liberal education, it could be seen as a natural progression for the school to continue to project a public identity of modern forward-thinking education. Echoing the values of the UN Universal Declaration of Human Rights, like many schools of a similar foundation of values (Tate, 2016), the school developed a vision of increasingly open-ended form of pedagogy, enabling students to further develop values of individualism, democracy and egalitarianism. Taking a sociological perspective of the literature about international schooling, it can be useful to recognise that, during the period of research, the school was undergoing a ‘transitional phase’,

shifting between the more traditional phase of international schools (Bunnell, 2008; 2020), towards a future-focused, newer phase of international education. In the former phase, often characterising international schools of the past, the pedagogy and roles of teachers were often founded on bonds similar to that of family loyalty, where shared values were where the seeds of day-to-day practice emerged and were sustained. In the latter, contemporary, future-focused phase, values of an international school are still claimed to maintain the intercultural ideals of the past, and yet are also associated is characterised as serving an emerging Global Middle Class (Ball and Nikita, 2014) and satisfying the changing pressures from external agencies, such as accrediting bodies, universities and wider discourses of modern education (Bunnell, 2020). The 'transitional phase', currently being experienced in many schools around the world, therefore involves a period of change in pedagogical practices and expectations of teachers' professional roles. This is because, compared to the more traditional phase of the past, the school structures, styles of teaching and curriculum focus in this notion of modern education, are often less teacher-led and the curriculum content has a fluidity between disciplines and real-world contexts. Using the pedagogical concepts of Basil Bernstein (2000), this can be described as a shift towards weaker framing of teaching and learning and also a weaker classification of curricula.

5.2.3 Freedom and choice in curriculum development

The school's curricula was not bound to any particular national curriculum, although it was influenced by many, due to the multicultural backgrounds of the teachers. The overall framework for developing curricula was that of the International Baccalaureate (IB) system. The school's framework provided by the IB from K-10 provides a general structure that allows space for developing the school's own curriculum and internally validated assessment processes, while the two final pre-university years (grades 11 and 12) follow the IB Diploma Programme, which has a prescribed content and assessment guidelines that are assessed externally. Other pre-university pathways also existed in the school to allow students to access university without completing the full IB Diploma. Therefore, from Grades K-10, this school had considerable freedom of what was taught, how it was taught and the ways in which assessment of learning is conceptualised. The decisions about what and how to teach these year groups was made by teacher teams, within a structure of discipline-based departments in the middle and high sections of the school and in year groups teams in the elementary section. The L21 structure of committees, comprising members from all sections of the school, was therefore a separate and new space for knowledge to be re-contextualised, with often very different people taking on the role of chair-facilitator. The relationships between these quasi-formal roles of leadership (Supovitz, 2018) and their colleagues, including the teacher-leaders in the normative positional roles of middle-management, was something that teachers had to make sense of during this period of change. Routes of communication, the ways in which areas of committee work would be selected and the extent to which a committee member or chair-facilitator could influence an L21 committee agenda, were all horizontal forms of knowledge that were new and also involved sense-making to be navigated.

5.3 Key events and policy messages for organisational change

During the period of research (in 2017 and 2018), the school was undergoing a period of transformation towards a more personalised form of education with flexible scheduling, curricula and pedagogical relationships. The main period of transformation was communicated, through the school website, parent information meetings and faculty communications, as a 5-year period between 2016 and 2021, after which the key transformations would have taken place, with reflective ongoing development in the consequent years. This 5-year process of transformation was given a title by the school, which in this research will be referred to as LEARNING21 (L21). L21 had an associated logo, which was printed on t-shirts and stickers. An L21 parent ambassador programme was set up for volunteer parents to attend training sessions, earn an L21 ambassador card and be a voice within the parent community. The organisational change process and its aims were therefore very much publicised among stakeholders as a positive shift in students' education.

The L21 vision, that was presented to teachers and other stake-holders, did not prescribe specific curricula, systems or pedagogical processes, but rather broader targets pertaining to 21st century learning and student-agency driven goals that would be a guiding focus for educators' inquiry into how this can be brought about. The educators in the school were tasked with the purpose of reforming the school to create a learning environment in which these targets can be fulfilled. Each educator, including all teachers, teaching assistants as well as school leaders were required to engage in the collaborative process of translating an over-riding large policy idea into structures and systems within the school to *"To meet the learning and developmental needs of every student"* in its community, as quoted as the L21

vision on the school website. To this end, committees were formed, in a structure decided by senior leaders, for inter-connected aspects of the educational ecosystem, comprising the participation of all educators in the school.

21 broad L21 targets for organisational change were listed as follows:

Table. 5.1

Broad targets presented to guide L21 process of organisational change

L21 Targets presented as the overall vision to guide L21 committee work	
1	The school's culture is learning-focused
2	The school develops self-directed learners
3	Concept-based curriculum
4	Inquiry-driven learning
5	Academic and intellectual thinking
6	All learners are prepared for volatility, uncertainty, complexity, ambiguity (VUCA)
7	Vertically phased, essential competencies
8	Competence-based progression
9	Transdisciplinary, interdisciplinary, and multidisciplinary learning
10	Co-constructed & personally relevant curriculum
11	Real-world, connected, practical learning
12	Individualised schedules / timetables
13	Individualised instruction and teaching
14	Vertically and horizontally flexible & variable learner groups
15	Flexible, diverse & variable spaces
16	Continuous personalised feedback and reporting
17	Collaborative teacher planning
18	Collegial coaching and mentoring
19	Team teaching
20	Adaptive support network for all learners
21	All community members will become ethical and passionate stewards of our community and planet.

Throughout the period of this research, the purpose of the L21 process of educational change at the school was articulated repeatedly, in whole-school staff meetings and in parent meetings as founded in research about learning. It was stated in whole-school meetings and in steering committee meetings that this over-arching idea was greatly

influenced by modern understandings of the “state of flow” (Csikszentmihalyi, 2002) in which people learn and perform at an optimum.

The general message about the purpose of the L21 process was as follows: that the world is changing as are the career opportunities for young people. Since many traditional career pathways are mechanised and obsolete, students need to be prepared for the knowledge economy and accordingly, they need a diverse skill-set and adaptive approach to work in order to be successful. During their school careers, therefore, students’ learning needs to be multifaceted and focused on problem solving skills. Furthermore, within this same message was the embedded the idea that knowledge is widely available and students need to know how to pick and choose and realign their work to their goals.

Consistent broad messages that were shared by senior leaders, in whole school meetings, for each year of L21, included the following:

1. The 5-year process of LEARNING 21 (L21), involves a process of transformation which requires the input and decision-making of all teachers as well as school leaders.

Parents and students would also be invited to volunteer and be part of L21 committees.
2. The goal of “the learning needs of each child” will be met. To enable this, students’ learning experiences would not, eventually, continue to take place in regularly scheduled classes with fixed durations of taught units.
3. The idea of a flexible schedule where students may, because of their interests and needs, spend an entire morning on specific activities as varied as mathematics or painting. The flexible scheduling would also allow students to progress at a pace that

is appropriate to the abilities of each individual – so a grade 7 student could take a grade 10 course in one subject and perhaps be continuing to improve in another subject in a course usually aimed at grade 6 students. In this way, students would not be restricted in their progression by their age.

4. The idea of courses co-created between students and teachers, as well as the vision of increased flexibility in the way school learning spaces are structured and used.
5. The idea that students' process of learning and ways of demonstrating learning should be varied, with choice and voice, with options not limited by expectations of external agencies such as assessment systems that teachers may have taught in the past.
6. The idea that students will enter work-lives that are very different to those in the past. The idea that young people need to forge their own paths and create their own work pathways unlike in the past where it was possible to trust in a set career pathway. The term 'VUCA' (volatility, uncertainty, creativity and ambiguity) was shared as a concept to describe the unpredictability of the nature of work in the near and distant future.

Senior leaders emphasised, in whole-school meetings, that all voices should be heard, when discussing the details of how L21 pedagogy and systems would progress and that disagreement was encouraged in order to eventually reach consensus. Therefore, although the term 'democratic leadership' was not used, the approach of democratic leadership was implied and described in a number of ways (Goleman, 2000).

Teachers were explicitly told that they were expected to work in L21 committees, opting to chair them if they so wished. Applying theory of knowledge production (Bernstein, 2000), teachers were therefore tasked with establishing and learning a vertical knowledge production process for L21, where the lines of communication from senior leaders to classroom teachers were different compared to the positional leadership hierarchy that also existed in the school. Teachers were also establishing new horizontal knowledge relationships, working alongside colleagues from other sections of the school who taught a different age-range of students. The implication of this was that new structures, which were unclear to begin with, were expected to develop further clarity and to translate into day-to-day common-sense behaviours alongside the existing structures and behaviours that already existed in the school. The classification of each L21 committee topic was quite weak, and teachers were expected to define the issues and solutions associated with them. The relationship with senior leaders during L21 committee work was also weakly framed. While there was a senior leader in each committee, their role was of a regular member while a teacher would facilitate as a chair. This work took place while their regular day-to-day teaching and collaborative planning in their usual teaching teams continued.

It is within this framing and classification context that teachers were expected to

- 1) Create new units of learning within their own work context that incorporated L21 targets that were not already embedded in their teaching.
- 2) Choose from a selection of committees, relating to the L21 targets, to join as a member along with other teachers for across the three sections of the whole school.

- 3) Self-nominate themselves as a chair-facilitator of a committee that met once a week.

These positions were available only to educators who were not part of the senior leadership team.

- 4) Chair-facilitators of committees were also part of an L21 steering committee which met once a month to discuss work carried out and make directive decisions.

5.3.1 Sharing information in whole-school teacher meetings and events

The research took place during the second and third years of the 5-year L21 process. Key ideas and visions of the L21 change process for pedagogy, changes in systems and the way that teachers would be organised were presented and shared in whole-school meetings as shown in Fig 5.2 (next page).

The L21 committees and the overall aims of L21 were presented by senior school leaders in whole school meetings at the start of each of the two school years. Whole-school meetings took place on three further scheduled times in the year, after school hours, where updates of the L21 project were shared. In addition, there were two separate two-day sessions of in-school professional development that were organised with a schedule to work on the ongoing process of L21. In all whole-school meetings, there were segments led by classroom teachers who volunteered to do so and who were not senior leaders. Also, during the two-day professional development sessions, there were information sessions run by teachers as well as senior leaders.

Table 5.2
Key information sharing by the time of interview data collection phases

Year 2 of L21 (phase one interviews took place during this year)		Year 3 of L21 (phase two interviews took place during this year)	
Time of whole-school meetings	Key information	Time of whole-school meetings	Key information
Whole-school meetings before the start of teaching at the beginning of the year (August)	<p>Opportunity for teachers to choose their roles in L21 committees</p> <p>Teachers were told they were to implement at least one L21 target that was new to them in their unit planning, in some cases producing entirely new learning units</p>	Whole-school meetings before the start of teaching at the beginning of the year (August)	<p>Opportunity for teachers to choose their roles in 'L21 Action Committees'</p> <p>This year, all middle-leaders holding positions of responsibility were asked to take on the roles of L21 Action Committee chairs</p>
Whole-school meetings during two-day professional development days (October)	Collaborative planning time was provided for innovative new units. Basic plans were showcased and celebrated.	Whole-school meetings during two-day professional development days (October)	Collaborative planning time provided for L21 Action Committees
Two additional whole-school L21 meetings on a Wednesday afternoon		Two additional whole-school L21 meetings on a Wednesday afternoon	
Whole-school meetings during two-day professional development days (March)	Some of the new innovative learning units that had taken place were presented to all teachers	Whole-school meetings during two-day professional development days (March)	
Final celebration of L21 work (April)	<p>Posters of work done presented by each committee</p> <p>Presentations of new units of learning</p>	Final celebration of L21 work (April)	Presentation of work done by each committee

Interview participants described the policy message, received during whole-school meetings led by senior leaders, that they were encouraged, as leaders, to take ownership over organisational change. While this 'ownership' and 'leadership' was loosely described as

associated with innovations in teaching and making decisions in committees about aspects of organisational change, the role of a teacher within these committees were not explained in detail. It was discussed in the literature review that senior administrative leaders can often under-estimate the many ways in which their intentions and expectations distributed leadership are understood (Torrance & Humes, 2014) and that interpretations of what this means to their role can vary greatly. While reassessing one's role in a changing environment, therefore, as described by Weick (1995), there may be a 'failure to conform to oneself' (p23) which then triggers a sense-making process, and an attempt to restore personal identity.

During whole-school meetings, I observed and was also told by participants during interviews, that teachers were told that they would be engaged in decision-making, and that they could choose the level of 'leadership' they could assume within the L21 committee structure. Using the example of modern multi-national companies, the idea was put forward that traditional roles in organisations of work are changing and that teachers and school systems need to adapt. The term VUCA – volatility, uncertainty, complexity, ambiguity – was used to describe both the experience of managing organisational change and the type of work environment that students would be entering when they left school. To this end, leadership trainers for 'adaptive schools' courses and experts in student-mentorship and curriculum design were invited to the school to train all middle leaders and any teacher who wished to participate with the policy message that all educators in the school were involved in the change process.

Senior leaders explained that as a structure for discussion and decision-making, all teachers would be organized, over two years, in committees or working groups of their choice, which would meet in teams after school hours on alternative Wednesday afternoons. The committees' names (to name a few: 'curriculum committee', 'assessment committee', 'flexible spaces committee', 'scheduling and timetabling committee', among others) and overall purpose were decided by senior leaders and teachers volunteered to be members or the chair of a committee of their choice, comprising members from 3 different sections of the school (Elementary, Middle and High schools). The brief of years 1 and 2 of L21 was to unpack the core aspect of the change ecosystem (for example, curriculum, assessment, timetable and scheduling and so on) and make recommendations of incremental change for the following year. To support specific niche interests that some teachers had, some working groups were devised and named by the teachers who were involved. The purpose of these working groups were decided by agreement between the teachers and senior leaders. Examples of working groups include: "the mindfulness group", "pathways to graduating group" and "learning through play".

In addition, the steering committee was to meet once a month, comprised of the chairs of L21 committees and senior leadership and to make decisions relevant to all committees and to set direction. Eventually, key decisions were made at the end of each year based on recommendations from L21 committees. Members of the steering committee also planned and led much of the whole-school meetings.

By the third year of L21, when the second phase of interviews took place, the original committees had been replaced by 'L21 Action Committees' to emphasise a shift away from

planning and towards implementing change on a larger scale. The broad guidance presented by senior leaders was that group members should decide their purpose, have it sanctioned by senior leaders and then progress on researching ways to carry them out. The groups included teachers from all three sections. As an example, the science curriculum action group had science teacher members from all three sections – elementary, middle and high schools - but not all science teachers were involved, as some were in other action groups such as ‘professional development action group’ and so on. Any teacher with middle-management responsibility was expected to chair an action group, thus increasing their responsibility in the school change process.

Many teachers who were interviewed, and some who consented to offer this information informally during meetings where I was a participant observer, expressed either interest or frustration in the following response commonly given by senior leaders: when asked for further clarification about how to organise pedagogy and curriculum, senior leaders often replied that they “do not know what it will look like” and that this needed to be a joint decision emerging from the inquiry process of the L21 committees. This aligns strongly with principles of democratic decision-making combined with a very weak framing of direction from senior leaders.

5.3.2 Key models of innovation shared during whole-school L21 meetings

As the L21 process progressed, various models and examples were shared of innovation that could further the school vision. These examples and models were presented by senior leaders and teacher-members of the steering committee and, sometimes, other teachers,

indicating that in the case of pedagogical innovation, the expertise of teachers was promoted by senior leaders as the driving force for change.

At the start of year 2 of L21, which is the first year of research interviews, at a whole-school meeting, a visual representation of 'competency-based progression' was shared by a senior leader, which demonstrated how modules of teaching units, from K to 12, could be arranged in flexible schedules to allow students to progress at a pace that was appropriate to their 'competence' and 'mastery' of a topic. In this way, students could progress, individually, slower or faster than in the current system, which had a more traditional approach to organising lesson progression. In this way, whole cohorts of students would not need to move from one unit to the next at a standard pace. This hypothetical vision also would allow some modules of teaching to focus solely on skills or an area of learning that is co-created with students and outside the confines of the core curriculum. While this system was not as yet in place, it was explained that this was a potential vision for the future of the school and that further suggestions would be drawn from the appropriate committees, such as the 'curriculum committee', 'scheduling committee' and 'assessment committee'. In this way, the use of committees as structures for developing solutions for larger, inter-connected aspects of change were highlighted.

A pictorial example of an online system for monitoring student progress was also shared, by a member of the associated L21 committee. This, again, was a suggestion for future development to support the 'competency-based progression' process and would be personalised for each student and managed by a mentor, with input from other teachers.

This, again, was explained to be at early stages of development and depended on how the remaining L21 committees would progress in proposing solutions to achieve L21 targets.

Decisions from the end of the year were presented at the start of the next, by senior leaders to all teachers of the school, although steering committee members were already aware of them. The decision that most impacted teachers in year 2 of L21, was that each teacher would, during the current academic year, plan and carry out a unit of teaching that incorporated a minimum of one L21 target that they did not usually use, drawing from existing or new areas of expertise, co-planning and co-teaching when possible. Grass-root innovations, thinking out of the box and generally an emergent form of teacher-leadership (Muijs and Harris, 2007) was encouraged here and ongoing efforts were shared as time progressed at follow-up whole-school meetings.

Examples and reflections of how teachers had incorporated L21 targets into teaching methods were shared through videos and presentations. One example was a month when Grade 7 students were taken off regular teaching schedules and undertook a mentored, self-directed inquiry project where they drew from elements of all their school subjects to achieve their final objective. Grade 5 students had a similarly weakly framed and classified project. In both cases, it was explained that the aims included developing students' self-management skills, ability to develop and follow lines of inquiry and advocate for their own learning needs. There were also inter-disciplinary units in the high school and overall, a broader range of opportunities for assessment to suit a broader range of student abilities.

An important decision that was presented in year 3 of L21, which was the second year of interviews, was that the middle and high school would include an extra day in its 8-day schedule rotation. This day, called 'day 9' would involve a menu of classes, set by teachers, that could be opted into by students. These included classes such as 'extra maths lesson', 'independent study time' as well as special skill sessions such as 'music practice' or 'essay feedback'. This was an important shift within the school that provided a structure for choices to be created and offered by teachers as well as chosen by students. This is an example of the way that a structure of vertical knowledge impacted some of the the sense-making of what choice means, in terms of what is learnt and how.

During a 2-day professional development session, it was shared in a whole-school meeting, that selected areas of the schools would be rebuilt to accommodate 'flexible learning spaces'. For this to happen, a number of classrooms walls would be broken down and, with the support of a designer. This designer presented a number of models to the whole school and explained ways in which it provided a variety of working areas of different kinds, structures and shapes to stimulate the imagination. This again, was presented by the L21 'spaces committee' as a structure to create opportunities for a variety of flexible teaching and learning techniques. Before the building began, the senior leaders presented the idea that departments and year groups could choose to pilot the use of these areas.

An important shift in in-house professional development was that the L21 'professional learning' committee was responsible for running it, including setting up teacher-led workshops that teachers could sign-up and attend. The senior leaders were given timeslots in the mornings to present to the whole-school. They also set up a professional learning

book club, including celebratory breakfasts and on-line support. In this way, emergent teacher-leadership was apparent in areas where teacher-leaders could build consensus and carry out their jobs without feeling the need for guidance from senior leaders.

5.4 Conclusion of this chapter

The setting of the school and the ways in which organisational change messages were shared with teachers throughout the period of research is important as back ground for understanding how teachers' sense-making transpired. The overall vision of both pedagogical shifts and the ways in which teachers were expected to work together, in a democratic framework of collaboration, were all aspects of organisational change that teachers had to make sense of, in particular, in the ways in which they would play a professional role.

Chapter 6: Analysis of Data

6.1 Introduction

In this chapter I present an analysis of the data of participants' narratives of sense-making of their experiences of participating in a school's organisational change as their perspectives evolved over an 18-month period. The three areas of organisational change that emerged through the initial analysis of sense-making narratives are:

1. Teachers' sense-making of new pedagogical practices for personalised education
2. Teachers' sense-making of their roles and contributions during the organisational change process.
3. Teachers' evaluations of how the change enactment matched their expectations and, due to this aspect of sense-making, the ways in which they engaged with the process.

For the first two points above, I shall present the outcome space of teachers' experience of the change phenomena through categories of sense-making that were elicited from the data in line with phenomenographic methodology. In this way the collective meaning of two aspects of organisational change will be explained through an analysis of the internal categories representing variations of meaning ascribed by the participants. These categories will then be discussed using the analytical framework presented in chapter 3. For the third point, I shall illustrate teachers' experience by using a mapping heuristic used previously by Luttenberg et al (2013) to illustrate the shifting patterns of engagement that participants

expressed, in terms of how their expectations were met during the organisational change process.

Table 6.1
Two stages of analysis for three aspects of sense-making

	Stage 1 of analysis	Stage 2 of analysis
Aspect of organisational change	Phenomenographic analysis focused on emic concepts and emergent ideas	Use of etic concepts (the analytical framework) to further analyse and explain insights from stage 1 of analysis
Sense-making of personalised education	Identifying dimensions of variation and phenomenographic categories	Analytical concepts from Bernstein (2000) provide explanatory language for insights about pedagogical beliefs
Sense-making of teachers' roles and contributions (leadership)	Identifying dimensions of variation and phenomenographic categories	Analytical concepts from teacher-leadership literature and Bernstein (2000) provide explanatory language for insights for teacher-leadership
Sense-making of how change enactment matched expectations (engagement)	From each participants' narratives, identifying their engagement using the model by Luttenberg et al (2013)	Analytical concepts from teacher-leadership literature and Bernstein (2000) provide explanatory language for insights about teachers' level of engagement due to their evaluation of the ongoing change process

In this section I will first present the *dimensions of variation* as analytical concepts that emerged from the data and provide explanatory commonalities and differences between the variations of categories (Marton and Booth, 1997) that make up the participants' conceptualisations of changes in pedagogy and teachers' roles in leadership.

6.1.1 Dimensions of variation in participants' experience of organisational change

Over the 18-month period of data collection and on-going analysis, clusters of meaning were considered, shifted and regrouped into categories of variation as I, the researcher, looked for areas of commonality and difference in meaning and considered further theoretical underpinnings for analysis. Following Marton and Booth (1997), the phenomenographic categories have connecting threads of meaning as well as *critical aspects* of differences which are the *dimensions of variation* (Lo, 2012). While the categories will be discussed later in the chapter, the two *critical aspects* or analytical concepts that make up the *dimensions of variation* are highlighted here.

Basil Bernstein's concepts of *classification* of curricula and *framing* of teaching-learning relationships (Bernstein, 1971, 2000) were useful ideas for demonstrating the ways in which teachers' interpretation of the phenomena vary. In the case of the pedagogical shifts taking place in the school, this was noticed directly through the way that teaching and learning was described. For example, some participants were strong advocates for weaker framing of teacher-student relationships than others and this was a strong distinguishing feature of their how they explained what they believed was valuable in education. In the case of teachers' changing roles within the time of organisational change, participants' narratives revealed how the directives shared by senior leaders were generally weakly framed and this led to a variety of consequences and responses in teachers. Therefore, the notion of strong or weak boundaries of classification and framing has explanatory power to shine a light on the different meanings that teachers have ascribed to their pedagogical activities in and outside the classroom and also their relationships with other educators.

A general outline of how the two dimensions of variation relate to the phenomena is represented in this table:

Table. 6.2
The two dimensions of variation for phenomenographic categories

Dimensions of Variation	Teachers' sense-making of pedagogical practices for personalised education	Teachers' sense-making of their roles and contributions during the organisational change process
Framing	<p>The dimension of <i>framing</i> is concerned with the level to which classroom interactions are teacher-led or student-led.</p> <p>This dimension also relates to the level to which scheduling and course structures provides opportunities for students to make choices about what they learn and how</p>	<p>Both these dimension (<i>framing</i> and <i>classification</i>) are concerned with the relationships of power and clarity of expectations provided by school leaders about the scope of teachers' leadership contributions in the organisational change process.</p> <p>These dimensions therefore relate to the way that the following aspects of <i>vertical knowledge</i> for L21 was conveyed through the communications between senior leaders and teachers:</p>
Classification	<p>The dimension of <i>classification</i> is concerned with the extent to which students are taught disciplines that are distinctly identified and separated in knowledge and skill. This also relates to the extent to which standard sequences of knowledge and skills are maintained.</p> <p>The weaker the classification, the more likely it is that the curriculum provides opportunity for learning through problem-solving in real-world contexts, with inter-disciplinary approaches and resources.</p>	<ul style="list-style-type: none"> • The scope of teacher-leaders in L21 quasi-formal positions of leadership • The relationship between L21 committees and how decisions can be made and implemented • Communication pathways teachers might take to enact grass-root initiatives • ongoing support, validation and clarification of whether teachers' leadership work was in alignment with school vision <p>These dimensions of variation also relate to the ways in which horizontal knowledge was developed through communication among peers in the heterarchical relationships within the L21 process</p>

6.1.2 Applying the dimensions of variation – an overview

Before beginning a detailed analysis of each of the 3 aspects of organisational change, some examples of the application of the *dimensions of variation* (classification and framing) to the analysis of data is presented in this section. This lays the foundation of further analysis in the next sections which focus specifically on the 3 aspects of change. Analysis of data demonstrated that teachers experienced a very weak framing for the vision of both pedagogical change and the roles that they would play in the 5-year organisational change plan, LEARNING 21. As is the purpose of weak framing, for 13 of the 15 participants, this was perceived as providing a broad scope of open creativity for teachers to explore areas of teaching and learning that they valued, and was described very positively in the first phase of interviews: “Where curriculum meets your own interest and kind of makes its own space”. Similarly, 5 participants, who were positioned in improvised or quasi-formal positions of leadership (Supovitz, 2018) within the L21 structure, saw the weak classification of what would be discussed in each L21 committee as an opportunity to guide strategy beyond their own classrooms and they expressed excitement by this prospect, during the first phase of interviews. In particular, for these L21 committee leaders, their automatic membership to the central steering committee of L21 mean that “it’s good to have conversations that are actually about education and not just complaining about what doesn't happen”.

By the time of the second phase of interviews, the loose culture (Hunzicker, 2017) of the school led to mixed feelings about the process of L21. While, through narratives, it was clear that teachers had overlapping and yet different ideas about how weakly framed teaching and learning should be at the school. There was also disagreement about the strength of

classification of disciplines that were appropriate at the school. Due to the weak framing of L21 collaboration processes, the L21 committees were eventually described as having a 'rudderless process' where 'nothing happened'. By the time of the second phase of interviews, 3 out of the 5 L21 committee leaders explained that they faced difficulties in trying to create a strong focus for committee work because the cultural norm existed within the school that all viewpoints were provided equal opportunity of expression. Therefore, when they were undermined or when committee members wished to discuss such a wide variety of things that they had no authority or guidance to give priority to one idea over another.

Similarly, because of the loose framing of pedagogical vision presented by senior leaders, and unclear systems of feedback to teachers, many participants explained that new teaching initiatives were not being validated through feedback and therefore there was uncertainty about whether or not to continue with new innovations. These teachers therefore, generally, felt free to make decisions in their own classrooms but felt limited in their influence beyond their immediate teaching.

While this section summarised some of the key issues that arose, the next section explores the phenomenographic categories of variation of the 3 aspects of organisational change in more detail.

6.2 An analysis of teachers' different perceptions of personalised education

6.2.1 Introduction

Following phenomenographic methodology, the categories of participants' perspectives of the school's pedagogical vision emerged from the data and created an "outcome space" - which is a "comprehensive expression of the research phenomenon" (Ireland et al, 2009. P10). Since teachers had been tasked with the responsibility of defining the details of pedagogy, following broad targets provided by senior leaders, these interpretations within teachers' sense-making narratives represent the type of expertise and leadership that was demanded of them to develop the next stage of school change. There were five categories of variation that, together, make up the conceptualisation, or 'outcome space', of personalised education as understood by teachers at the school during the period of research. The categories represent dominant narratives of how teachers expected their teaching experience to change in terms of pedagogy, and relate to one another by both contrasting and shared elements.

The categories described below illustrate how similar themes within pedagogy can be understood differently by individuals, enough so that they could talk at cross-purposes and mistake partial disagreement with rejection or dissent. The categories also illuminate aspects of personalised education that are valued by members of the community and raise questions of how or whether they can coexist within the same school environment.

6.2.2 The outcome space and dimensions of variation for participants' varied descriptions of personalised education

An analysis of the categories of participants' sense-making, of what personalised education should be, is presented in this section.

The two dimensions of variation to explain how participants believed that personalised education should manifest in the school are identified here as ***classification*** and ***framing***.

These two dimensions of variation are threads of connection between categories as well as areas of critical difference. These categories help to show how teachers' sense-making led to overlapping and yet conflicting notions of what to expect in personalised education.

Table 6.3
Dimensions of variation and the outcome space of teachers' sense-making of personalised education

The Outcome Space: teachers' sense-making of personalised education		
Dimensions of Variation Describes variation within and between categories of the phenomenon	5 categories of teachers' sense-making of personalised education	Categories viewed through the lens of dimensions of variation
1. Framing 2. Classification	Self-directed-learning: Students decide what to learn and how	Weakest forms of framing and classification
	Structured courses with varying levels of choice and flexibility	Stronger framing than self-directed learning, with varied strengths of classification
	Personalised conversations between teacher and student	Framing of different strengths
	Flexible academic pathways	Classification explained by participants provide choice and learning pathways, with different underlying beliefs about students' learning priorities
	Education that fits a child's development	

The details of each category are described in detail further on in this section. Preceding this, some of the insights elicited from the differences and commonalities of categories are discussed first.

6.2.2.1 Varied opinions about the ideal strength and weakness of framing and classification was a source of both inspiration and frustration

There was no correlation between the age-group taught by the teachers and the extent to which weakness of classification or framing was expressed in the sense-making narratives. I have interpreted this to be because teachers' sense-making of evolving pedagogical techniques and structures was relative to their existing norms of work. For example, the student support teachers were inclined towards providing more structure within curricula regardless of whether they taught in the elementary, middle or high school, in order to better understand the stages of students' learning. On the other hand, some mainstream middle school teachers designed a very loosely framed new unit of study with loosely classified inter-disciplinary projects. Some high school teachers advocated for a much weaker classification of curricula than was practiced in the school at the time of research, while others focused on weaker framing of teaching within the existing courses. Since the existing structure of curricula in the school, in line with IB frameworks, has a progressively stronger classification of curricula with older students preparing for the IB Diploma (Cambridge, 2011b), the sense-making narratives do not represent the curricula that exists in the school, but rather what had drawn participants' attention as the future of teaching at the school.

The extent to which one weakens the classification of disciplines and the framing of teaching- learning relationships was an issue of contention for participants. This is illustrated through the variations of ways in which they made sense of the pedagogical

shifts at the school and comments about interactions with colleagues, as will be shown within the categories of variation in the following sections.

6.2.2.2 Sense-making focuses on personal context of work

Participants' interpretations and responses to interview questions about personalised education focused on areas where sense-making was pertinent to their personal work-life or previous work experience. This is in agreement with Coburn's (2005) sense-making case-studies where teachers connected with selected aspects of policy directives, based on a close connection to their own work and leave other areas unrecognised or unnoticed. Therefore, some participants discussed personalisation of education by focusing on specific micro-practices within classrooms that represented their dominant beliefs about student learning, while other participants discussed personalised education in terms of wider discourses of learning in a real-world context. Often the latter response was from a teacher who had some middle leadership responsibilities or was involved in the L21 steering committee.

Some participants explained how some of their own most meaningful learning experiences had been by following their passionate interests down avenues of learning and that this inspired their vision of personalised education. One teacher, who used to be a ski-instructor, described that experience as the way he learnt to be flexible in his approach to teaching, responding to the ever-changing needs of student. Narratives of sense-making of personalised education were in this way, often accompanied by a personal story of wider life experiences. This led to deep assumptions about values within personalised education that led to innovative planning, as will be seen in later sections of this chapter. At the same

time, these values were, at times, left unacknowledged by other teachers or senior leaders, which led to confusion or frustration as teachers attempted to assert leadership in their areas of work.

6.2.3 A description of participants' phenomenographic categories of what they believe personalised education should be

The overlap and representation of the categories by participants is in the table below:

Participants' emphasis, in interview narratives, on aspects of personalisation of education

KEY	++ strong emphasis or high frequency in narrative (high dominant utterances)
	+ some emphasis or high frequency in narrative (dominant utterances)

Table 6.4

Participants' categories of variation for personalised education

Participant #	Years at school at the time of interview phase 1	Self-directed learning: students choose what to learn and how	Structured courses with varying levels of choice and flexibility	Personalised conversations between teacher and student	Flexible academic pathways	Education that fits a child's development	Phase 1 interview	Phase 2 interview
1	3	+	++		++		y	Y
2	3	+	++		++		y	y
3.	10+		++	+		+	y	y
4.	4	+	++	++			y	y
5.	4	+	++	+			y	y
6.	2	++				+	y	
7.	5	++	+	+	+	++	y	
8.	6	++		++	+		y	y
9.	7	+	++	+			y	y
10.	7		+	+	+	++		y
11.	9	++	+	++	++		y	y
12.	9	+	++		++		y	y
13.	5	++		+	+		y	y
14.	10+			++	+	++	y	
15.	10+	++	++	+			y	

Total ++	6	8	4	4	3
Total +	6	3	7	5	2

Demonstrating dominant categories (using the symbols + or ++) in this way serves the purpose of illustrating the high frequency or emphasis of certain topics of narratives in the interviews. It also demonstrates that, while there are some common ideas, participants focused on a variety of ideas, in different combinations, often omitting ideas that was highly relevant to someone else. 4 participants had left the school before the phase 2 interviews took place and 1 participant was unavailable during the time of the first interview but participated during phase 2 interviews.

The next section describes each category of variation, demonstrating the ways in which teachers' sense-making of personalised education can be understood through classification and framing, while also showing the variations in beliefs about pedagogy that existed among participants.

Category 1. Self-directed learning: students choose what to learn and how

12 teachers advocated for this type of learning, although not all believed this should be the entire school experience for students at all times. Out of the five categories, this has the weakest framing and is characterised by students being unrestricted by classrooms or even, at times, specific timetabled blocks. Instead, in this model, students may be seen in various areas of the school, seeking out a variety of expertise either online or through teachers, collaborating in groups or choosing to work quietly on their own. Students could be working on individual projects which are very different from one another, seeking perspectives from different subject areas, or they could be simply learning a skill or area of knowledge expertise, specific to their needs. Classification of disciplines could be quite strong, or quite weak, depending on the interdisciplinary nature of the project.

The key idea expressed here, is that students should be empowered with ownership and leadership over what they learn, how they learn it and how they demonstrate what they know. This self-directed approach for student learning was described by some participants as essential for developing individual students' ability to guide their life pathways in an uncertain future where career pathways are ever-changing and unpredictable. In this way, participants advocating for this approach to schooling believed that a looser framing and classification of pedagogical structure creates opportunities for students to find out what drives them intellectually and emotionally in ways that would guide them throughout life:

“To be supported to have the habits of mind that seek to find personal meaning, or to begin with what is personally meaningful and inquire from there”

Some teachers emphasised the importance of students developing opinions and insights that extend beyond the teachers' direct instruction, and therefore not being limited by teachers' planning and thinking. In some cases, teachers expressed frustration with some of the curricula that students were made to learn to fulfil external examination requirements since, in their view, they held little meaningful purpose for the majority of students.

“It doesn't matter what is taught, but there should be passion, from kids or from teachers. The point is that there is a point to it. There needs to be a purpose.”

“if you if you give young people genuine opportunity to genuinely shape their learning ...they tend I think to ...go to much more depth and ...do so.. into kind of things that you wouldn't predict that they would be interested in”

Within this category, participants had various ideas of the types of teaching strategies needed, all which had different consequences for a teachers' role in planning and

instruction. Some participants imagined ways in which students would be able to self-pace their learning through a curriculum with reasonably strong classification, but with fewer essential items, and time provided to apply knowledge in an area of strong personal interest. Typically, for this approach, teachers described a format of blended learning, with pre-recorded videos combined with formal teaching and skill-based workshops. Other teachers described self-directed learning as blocks of time when students were away from regular curricular lessons and focusing on passion projects, flexibly making decisions about which disciplines to draw from, depending on the direction of their inquiries. While the levels of framing and classification vary even within this category, participants advocating for this type of learning shared the general view that teachers need to have “the attitude to try something new” so that students could have a passionate engagement with their learning through didactic discussion with teacher experts.

Participants described two examples of how this form of self-directed learning had been trialled in the school and how they had felt inspired while also considering ways in which this type of learning could be run with greater success and more widely in the school. Both examples had also been show-cased in whole-school meetings. One example was for grade 5 in the elementary section and the other was for grade 7 in the middle school section. In both cases, for several weeks, students were taken off regular scheduling and provided with the opportunity, with teacher mentorship, to create their own projects with assessment criteria and timelines and carry them out, choosing content to explore to achieve their goals. These two examples of very weak framing and classification were trialled as pilot programmes to learn more about running the school courses in a self-directed learning approach and were described as successful examples of “exploring what is possible”.

Two course programmes that had been introduced in the high school were also referred to by many participants as part of this category. One of these high school courses was a capstone programme where, as a pre-university course, was entirely co-constructed in content and assessment process between individual student and mentor, in an area of passionate interest of the student. The weak framing and classification of this capstone programme can be paralleled with a science course that was also introduced to high school. Here, within the general classification of natural sciences, nevertheless, there was no fixed content, but instead teachers supported small class sizes of students to create two main science projects a year and carry them out using natural science methodology, selecting relevant content to learn as they progressed. The successes of these two courses were shared among teachers in whole-school meetings and were mentioned in various interview narratives as examples of successful pedagogical shifts in the school. These examples demonstrate deep-seated beliefs in a particular form of pedagogy and also grass-root teacher leadership, described by Supovitz (2018) as organic teacher-leadership, where personal innovation and influence on others has led to changes that were supported by senior leaders.

Category 2: Structured courses with varying levels of choice and flexibility

This category involves a greater degree of structure and a stronger framing than in the self-directed model described above, while representing a shift towards a relatively weaker framing than teachers were accustomed to. These teachers expressed the need for students to be led by teachers through certain essential elements of a course to ensure that the essential course content is covered. These teachers expressed concern at providing weaker

framing, as was described in the self-directed category, explaining that the wide range of organisational and communication skills of students and the lack of experience of teachers in this type of teaching could mean that many students could “fall through the gaps”.

In this category, learning is personalised through standard units with overarching umbrella concepts, the option for developing individual research questions for inquiry, and a few options for sharing one’s learning. In this way, students follow a pace that is similar to one another, with some flexibility and have recognisable landmarks in their projects, shared with the group of student in their class-room.

“Personalised leaning is when students choose topic to study under a broad concept of something. Then they choose what to produce”

The following comments had elements of ambiguity and were made by advocates for this category of learning:

“Slow down the thinking by providing less content. Strip down content to what we think matters, negotiable, flexible components are based on student interests, ability and teachers’ interests”

Statements such as this that could, at times, lead to misunderstandings between colleagues about the level of framing they intended to provide in new units of learning since the comments echoed some of the ideas shared by the self-directed category. There were sufficient overlaps in ideas, particularly the looseness of categories of disciplines, between the two categories, that teachers found themselves, at times, speaking among themselves at cross purposes and the critical differences were a source of discomfort.

“I think there’s an idea that learning will just happen if you let the kids loose...it doesn’t work that way...where’s the check-ins...how do we know students really know what they say they know?”

In this category, participants expressed the idea that self-directed learning, as described in the first category, may not be appropriate for all students, although creating space for varying levels of personal inquiry was appropriate. Some of these teachers did, however, describe this version of student choice within a structured course as ‘self-directed learning’, which demonstrates how the same term could be used for different models of teaching and learning, and misunderstood during communication among colleagues.

The following idea was also expressed in a number of ways:

“Wide range is a key idea here – not everyone doing the same thing at the same time, wide range of things done – what is appropriate for each student”

When participants of this category described this idea the intention was that students pace self-select activities within the same lesson, with the same lesson objectives and time-frame. In the case of self-directed learning, the idea of doing different things was much broader, with a larger timescale for students to self-navigate.

Inter-disciplinary units described in this category differed from the self-directed-learning description. In this category, some teachers were inspired to develop inter-disciplinary projects, specifically combining existing units of different disciplines to create a looser classification of learning conditions. Unlike the self-directed category, here, timelines would be the same for all students, and resources for developing these projects would be restricted to certain curricular concepts, and therefore the classification is stronger than the

self-directed-learning category. The key idea was to make it increasingly normal for students to have access to resources from different disciplines, regardless of the project they work on, and to find ways to develop an individual perspective within their learning.

“Make sure they are accessing what is useful to them. What’s important is that they are able to find out and to filter you know reliable information from bad...that they’re able to take a position.”

“Teach organically through meaningful tasks,...not forced into some sort of inter-disciplinary unit”

Category 3: Personalised conversations between teacher and student

For some participants, a dominant narrative when describing personalised education was the importance of one-on-one conversations with teachers who mentored and guided students to develop their personal talents. The focus, then, is on teaching the individual student in ways that are personally deeply meaningful, rather than teaching a group of students what is seen to be generally believed to be required for that age group.

While one-on-one conversations between teachers and students was voiced as an essential part of students’ holistic learning about individual interests, strengths and areas of growth, the purpose of these discussions varied in the following ways, representing some of the ways in which participants disagreed with one another.

Some participants described the didactic relationship in teaching that supports the development of student voice during inquiry-based projects, “Inspiring conversations with teacher – not the same as lecturing ... creating a ‘space’ for experiences”.

Here, the focus was for teachers to provide expertise while providing sufficient space for students' unique interests to develop.

“Treating kids as individuals...It's been around forever...Not a new idea – personalised education has been around since education was invented....”

“Personalised learning emerges from a dialogical process between learner and facilitator.. each individual – with no assumptions that we know all their motivations”

Some participants expressed positive views on how the culture of the school already encouraged good communication between teachers and students, but that this sort of interaction tended to be ad hoc, rather than systematic. In this context, the term 'mentor' was used in a number of ways.

One participant who was involved in a committee developing a process for mentoring students explained that mentorship can be misunderstood as a “touchy-feely uncle or aunt relationship” and that, to the contrary, mentorship “is a teacher-student relationship with boundaries” that “allows students to take ownership” over their social-emotional responses as well as their studies.

Some teachers did not like the idea of being social-emotional support, but instead saw the role of mentor as a logistical advisor for managing schoolwork and choosing what to learn when presented with course options on 'flexible scheduling' days such as the 9th day in the middle and high school rotations. This represents a way of viewing the role of teachers as

external to the holistic development of the students rather than a partner in developing the whole-child.

“Teachers need to mentor students to take increasing ownership over their learning.

But it’s not my role to support them socially. That’s for the counsellors”

Category 4: Education personalised through pathways of course choices

For some participants, the most compelling description of personalised education was for students to not be restricted to grade groupings based on age, but rather on skill and interest. Here, learning pathways from course to course within each year and also from one year to the next are customised for an individual. For this purpose, multiple pathways and course options need to be designed to allow choice of learning pace and courses.

Tailored program of study for students’ needs – not necessarily what they want to do but what they need for future learning goals.

Timetabling reflecting that we won’t have 20 kids moving together from one block to another

For this designed structure of education, timetabling of lessons, mentoring and monitoring students’ choices and progress would require an overhaul of the school systems that were current at the time of the interviews.

For students who have ability to work beyond their grade level.. ‘I don’t want to be told I need to do something else’ – spend all morning doing a subject. Personalise when I study what I study..

Conversation with parents and students from the beginning – what is the child like, what do they like to do?

Participants who described personalised education in this way usually mentioned the school’s existing multiple ‘pathways’ to high school graduation. In this way, these participants voiced the importance of pathways through school courses that are externally recognised.

Category 5: Personalised Education that fits a child's developmental stage

This category is also about choice and options of courses and pathways of school careers, however it differs from the previous one as a child's social, emotional and cognitive developmental stages are seen as the most important aspect of a personalised program of instruction and how it unfolds as a choice of pathways over the years. Here, the key idea is that each student has a unique developmental pathway and that this should guide the choices of courses and the pace at which they progress from one course unit to the next.

“Nothing new to anyone in special education that every learner has a unique neural signature. Need to look at their individual profile and understand where their passion and interests are so we can match not just projects but the skill development. High motivation for a task is connected to high self-esteem and persistence with task”

This idea was voiced mainly from teachers with a background in supporting students with learning needs or who's own children have needed specific social-emotional or academic support. For them, this was the cornerstone of progressiveness in education and something that is often overlooked. They saw developmental stages as more important than academic mastery stages for all students, regardless of their academic abilities. Two of these participants expressed concern that skills and knowledge of disciplines, such as mathematics, was being placed in a higher value than socio-emotional development in the dominant conversations in the school.

“Math doesn't have to be linear but here it is taught that way. Story telling is a lot less linear.... But then you're talking about social learning you're also talking about emotional intelligence and emotional learning.... It's really important that they treat their friends right.”

One participant expressed concerns about how direct progression from one unit to the next without one's peers could lead to disruption in friendships.

“Competency-based progression should be an option rather than a must. Kids goofing off and hanging with friends is more important. All part of the school experience.”

6.2.4 Summary of sense-making of personalised education

While all teachers were already practitioners of student-centred inquiry-based learning, using techniques of debate, discussion and one-on-one support within their classrooms, they had a variety of views on the best way to move forward with the project of further personalising education. Although their perspectives echoed some of the messages voiced by senior leaders in whole-school meetings, their individual selection of certain messages demonstrates aspects of sense-making of matters that were most pertinent to them. The democratic culture promoted in the school enabled teachers to express the differences in the beliefs about the extent to which pedagogical change was needed and in which ways they would ideally proceed. The advocates of the self-directed learning category had a very similar approach to student learning as the approach that senior leaders were promoting for teachers as professional designers and inquirers about education. In the next section of this chapter, it will be shown that these differences of beliefs led to varying levels of assertion of teacher-leadership through the process of collaborative L21 meetings. As teachers grappled with new ways of working with one another through the L21 process, they were also making sense of the collective vision for how teaching and learning would take place at the school as changes commenced.

6.3 An analysis of teachers' different perspectives of their roles/contributions in the organisational change process

6.3.1 Introduction

The L21 process provided an open-ended vision of both pedagogical and systemic change, with a system of L21 committees set up to discuss and decide the details in a democratic setting. Teachers who were accustomed to asserting innovation mainly in their classroom and in small teaching groups, were now also working within a quasi-formal heterarchy of L21 committees. This work took place while they also continued to work and teach within the usual formal positions of hierarchy of the school. This presented an unusual time of change and led to teachers positioning themselves in relation to others, and within the school's activities, in ways that are elaborated further in this section. It was found that, as is often the case in organisations undergoing transitions (Torrance & Humes, 2015), teachers were expected, within certain quasi-formal (Supovitz, 2018) roles of leadership and membership in committees, to make sense of their roles and contributions themselves.

In this way, the case-study school provided the opportunity to take a close look at ways in which teachers made sense of their own contributions to organisational change, and the possible ways in which they could influence change when they were expected to apply teacher-leadership within democratic structures, such as committee systems and open-ended directives.

Following a phenomenographic approach to data-analysis, the participants' sense-making of their roles within the change process can be understood through categories, organised in

hierarchies. I chose this way of presenting the analysis, following the insights that emerged from the data. The hierarchical organisation of the categories, in this case, are by strength of influence that teachers perceived they had in their roles and contributions to the L21 process.

In light of Bernstein's theoretical framework, it can be said that teachers were provided with weak classification (Bernstein, 2000) of each umbrella L21 target within the 5-year vision of known as LEARNING 21 (L21). Also, over the time of research, the direction provided by senior leadership to teachers was weakly framed, promoting a democratic approach to teacher-leadership, with a wide range of possible directions that could be taken within L21 committee discussions. This weak framing from senior leaders applies to both the ways in which a pedagogical vision was presented to teachers as well as the ways in which teachers were supported in their work in L21 committees, which were the key structure put in place for teacher-leadership to flourish and make enactment of L21 organisational changes happen. The L21 committees themselves provided a relatively strong boundary of work within which each teacher was expected to contribute, although the task of providing internal details of the classification of each committee was left largely to the teachers. Teachers were expected to make sense of the vertical knowledge of L21 committee systems and the weakly classified L21 targets, and develop practices among themselves to develop constructive plans for organisational change.

The weak framing and classification of expectations provided by senior leaders, within the L21 committee system, led to a mix of optimism, enthusiasm, frustration and disengagement among teacher participants and this is presented here in the outcome space

through 5 categories of interpretation of teachers' roles in organisational change that emerged from the datasets. Applying the levels of autonomy and empowerment of teacher leadership described by Muijs and Harris (2007), it was noted that all three types of teacher engagements in leadership – restricted, emergent and developed - existed in various ways in the school.

6.3.2 The outcome space for teachers' sense-making of their roles in the school's organisational change process

The outcome space of teachers' sense-making of their roles within the organisational change process is represented through five emergent categories, following phenomenographic methodology. The categories have connecting threads of meaning as well as dimensions of variation that include framing and classification of vertical and horizontal knowledge (Bernstein, 1971,2000). To support the analytical process and descriptions, each category was named using key elements of key participants' utterances.

Table 6.5
Hierarchy of participants' categories of variation for roles and contributions

	5 categories of teachers' sense-making of their role and contribution to bringing about organisational change
Hierarchy of categories organised by strength of teachers' perceived contribution within the organisational change process (highest contribution at the top)	We are loosening the rope while building consensus
	I'm ready – I'm waiting for them to catch up
	Uncertainty is left unsupported
	My voice is lost and time is wasted
	More show than substance

Before explaining the details of the 5 categories and the significance of their overlaps and differences, here follows a summary of some of the key insights from the analysis of the categories.

6.3.2.2 Summary of some of the key issues of variation and ambiguity of sense-making that emerged from the analysis of data

Weak framing and unclear role boundaries eventually led to loss of enthusiasm and frustration

While teachers understood that they were expected to be agents for change, the boundaries of their roles in this process were unclear to them, as is often the case when democratic decision-making is encouraged during organisational change (Gastil, 1994). The extent to which teachers could exert their autonomy and the extent to which teachers could extend their influence was, at times, a source of confusion and anxiety. Through their sense-making processes, teachers responded through a variety of actions, including those of teacher-leadership.

Most participants' enthusiasm for trying out new innovative ideas within their own classroom was apparent, and this is consistent with the traditional notion that teachers have a sense of autonomy to organically (Supovitz, 2018) make decisions within their own classrooms (Hargreaves, 2009). The role of the L21 committees, however, was to create opportunities for teachers' ideas to be shared and be the basis of democratic decisions for the whole school. Some teachers perceived their roles as solely for their own students and classrooms and this may have reduced the extent to which they engaged in teacher-leadership to a restricted form (Muijs and Harris, 2007), where they limited their work to

attending L21 meetings and carrying out direct instructions from peers or senior leaders. Some of the other participants, who wished to participate to the wider L21 process, at times faced barriers to their progress - some found that their ideas reached a stalemate, conflicting with other ideas from colleagues, and did not move forward. At these critical moments, without an authoritative figure supporting the direction at critical times of disagreement among equal voices, decisions were sometimes left unmade and teachers in this situation did not know whether or not pushing their ideas forward was valid. Emergent leadership (ibid), in these case, was disrupted in its development. Communication between roles was blurred and some teachers could see no obvious way to develop channels of communication, exemplifying some of the issues that can arise in democratic settings of leadership where senior authoritative support and guidance is limited (Muijs and Harris, 2007; Starratt, 2001). Eventually, by the end of the research period, some teachers who had demonstrated emergent leadership in the wider L21 committee process at the start of the research, had reduced the sphere of their influence to just their classrooms. There were a few examples of how a teacher-leader was able to use a mix of different styles of communication and management of democratic decision-making. This approach to hybrid leadership (Gronn, 2009; Torrance and Humes, 2014) enabled them to navigate their role in different contexts and take their projects further than others.

In terms of leading pedagogical change, participants generally approached the vision of trying out new teaching practices with optimism. However, they had varying mental models of the extent to which they could make these decisions independently and how much influence they could apply to others. For some participants, this meant that teachers were empowered to explore personalised education in ways they saw fit – sometimes working on

a larger scale with others, either following or convincing other, and at other times trying out new things within their classrooms. The confidence to choose areas of innovation and apply a variety of teacher-leadership techniques reflects the type of hybrid leadership advocated by Gronn (2009) as a sound and workable way to approach distributed and democratically oriented teacher-leadership.

There were other participants whose sense-making narratives focused on areas of whole-school discussions that they disagreed with. For these participants, there appeared to be, at times, a reluctance to make any changes at all, even the areas they found agreeable without being sure that senior leaders were in complete alignment with their ideas. While all participants expressed their belief that they were trusted by senior leaders to try new things in their classrooms, these teachers did not want to develop new teaching practices that would eventually need to be changed again and therefore, required a more specific form of support from senior leaders. This represents a type of restricted leadership, with a dimension of independence since some of these teachers proceeded with old practices due to deep-seated beliefs. This would have been the appropriate moment for coaching or clarification from a senior leader, providing authority and moral support (Muijs and Harris, 2007).

Quasi-formal positions of responsibility were restricted by lack of authority held otherwise by hierarchical structures

Although senior leaders repeatedly described all teachers as 'leaders' in their chosen area of the L21 process, they were described in quite general terms, and therefore participants' understanding of what this means varied greatly. While the chair-facilitators of the

committees had a legitimacy to their role through membership of the L21 steering committee and by setting the agenda of the meeting, they lacked the authority to put aside one idea and focus on another, as is often the case with quasi-formal leadership positions (Supovitz, 2018). Three different participants, all in L21 chair-facilitator roles, described moments when they tried to assert their role by narrowing the topics of conversation and were met with strong resistance and in one case was told that they had no right to do so. There were also some situations in which a chair felt they had to drop certain topics which they valued, because of protests from a few people in the group.

The scope of committee chair-facilitators' role was, therefore, unclear in terms of interactions with peers within the group and therefore, teachers were faced with the challenge of negotiating their own levels of authority within their own committees. The notion of vertical knowledge creation, in the case of the L21 structure, was separate from the hierarchy of positional leaders in the school. For any given individual, therefore, the roles of L21 chairs were often quite different from their role and relationship to others in their day-to-day work as teachers. This presented another level of challenge of working within a familiar hierarchical positional leadership structure with a super-imposed alternative structure of leadership for L21, for which levels of authority were unclear.

By the time the second phase of interviews took place, all participants felt that, at some level, the committee work was unproductive and in a variety of ways described the moments where they felt their work had little impact on the goals of the change. There was an awareness, and at times, expressed frustration that personalised education was

perceived differently by different teachers in the school and that, therefore, as strategies that they were working on, could take a number of different forms in the school's future.

6.3.3

The Six Categories to describe participants' experiences of leadership and strategies for change

The categories of themes that emerged are summarized below.

Participants' emphasis, in interview narratives, on aspects of personalization of education

KEY	++ strong emphasis or high frequency in narrative (high dominant utterances)
	+ some emphasis or high frequency in narrative (dominant utterances)

Table 6.6:

Participants' categories of variation for roles and contributions to the change process

Participant #	Years at school at the time of interview phase 1	We are loosening the rope while building consensus	I tried something really different	I'm ready – I'm waiting for them to catch up	Uncertainty is left unsupported	My voice is lost and time is wasted	More show than substance	Phase 1 interview	Phase 2 interview
1.	3	++	+			++		y	Y
2.	3			++		+	++	y	y
3.	10+			+	++	++	+	y	y
4.	4			+	+	+		y	y
5.	4			++		+	++	y	y
6.	2			+				y	
7.	5	++	++	+				y	
8.	6	++	++		+	+		y	y
9.	7	+	++		+	+		y	y
10.	7				++	++			y
11.	9	++						y	y
12.	9	++				+		y	y
13.	5		+	+	++	++	+	y	y
14.	10+			+	+	+		y	
15.	10+			++		+		y	

++		5	3	3	3	4	2
----	--	---	---	---	---	---	---

+		1	2	6	4	8	2
---	--	---	---	---	---	---	---

Demonstrating dominant categories (using the symbols + or ++) in this way serves the purpose of illustrating the high frequency or emphasis of certain topics of narratives in the interviews. It also demonstrates that, while there are some common ideas, participants focused on a variety of ideas, in different combinations, often omitting ideas that was highly relevant to someone else.

Category 1: We are loosening the rope while building consensus

Participants who described the experience of this category were the most supportive of democratic decision-making processes and organisation of L21 committees to progress the organisational change. Here, participants described the idea of decision-making by consensus as a positive way forward. A participant who was also a chair-facilitator of an L21 committee described his role exercising the “loosening of of the rope – to use a crude cowboy analogy” to create space for discussion and disagreement, eventually leading to consensus. They described teacher-leaders’ roles as critical for in shifting mind-sets within the school and that the steering committee was providing an organised way to ensure that this was done well.

Another participant described the process of discussion and decision-making in L21 committees as the “only viable way to achieve what we are intending to do”. The role-modelling of senior leaders was highlighted as they were “adopting the posture of learning along with us and demonstrating how an awareness of ego-less discussion can lead to a common consciousness”.

Participants in this category generally spoke favourably about the L21 committee process, during the first phase of interviews, although not all felt the same way by the time of the second phase. They felt that 'The steering committee is quite representative' and that it was 'Nice to talk about education' and also had a sense of how the vertical knowledge production would take place through channels for decision-making. By the time of the second phase of interviews, however, the participants who contributed to this category were less positive about the L21 committee process and the success of building consensus.

For teachers who were interested in a much larger scale of structural change in the school, including renovation of building interiors to create open-plan learning spaces, or added flexibility to the school timetabling schedule, there were utterances that showed they believed that some or all of their ideas had been voiced and heard by senior leadership.

"This is about teachers having a voice in creating what will be the reality of personalised learning at this school"

One participant, who chair-facilitated an L21 committee, explained that at different times they exerted different levels of control of meeting agendas, forms of discussion and decision-making. While taking into account the views of the group while setting the agenda, this teacher-leader was comfortable about asserting a level of authority over the topics of discussion if they felt the conversations were unfocused. Also, while decisions were generally made by consensus, there were times when this teacher-leader would put forward a firm decision and asked for feedback, following which some changes would be made. This participant described how they used similar methods in their day-to-day position of responsibility in the school. This demonstration of hybrid leadership (Gronn, 2009), while

retaining the general principles of democratic decision-making, enabled this committee to complete several projects successfully by using different leadership approaches. This also demonstrates the participant's belief that they could negotiate their own role of authority within the L21 committee.

Category 2: I tried something really different

The participants voicing this view had participated in an L21 initiative that they perceived as more innovative than their usual teaching practices.

Overall, participants' perceived experience was that they were trusted to make their own choices of how to conduct their lessons with little or no supervision. One of the narratives heard often was that teachers had been hired for their experience and expertise and therefore were trusted to produce lessons and course units that provided good learning experiences.

“School leaders are very encouraging. They are giving teachers more opportunities and encouragement. I have the freedom to pursue whatever I want”

There were a number of short projects described during the interviews that either demonstrated a weakened framing or classification – or both – in teaching practices, although not all were seen as derived directly from L21 committee decisions.

Projects that were clearly derived as large-scale projects that were supported through L21 committee processes, were standalone pilot projects that were run by the Grade 7 and Grade 5 level teams of teachers. For several weeks, Grades 7 and 5 students' timetables

were altered to allow flexible choice throughout the day, moving beyond the idea of the flexible 9th day, and trialling the experience of the entire school experience involving student choice of what to learn, how and when. During this period, with mentorship, students followed individual projects, with decided their own criteria for success, and chose how to allocate their time throughout any given day. They were given access to a teacher mentor and a variety of subject areas throughout the day and made choices of where to be throughout the days of this period, to complete the projects. All participants who mentioned these projects spoke positively about them, had seen the video presentations of the overall process in whole-school meetings and in some cases, had participated in them as teachers.

“I learnt a lot..lot more about the students than I would usually. It took a lot of work to keep track of the students and their progress...but it was really great”

“some students needed more help..some didn’t really complete, but they all were so happy and they learnt so much about managing themselves”

“we learnt a lot about what we need to do before we can make this the norm at this school. We need to work on mentoring a lot more and really know how to make it work...not all the students are ready to do this all the time..”

Category 3: I’m ready – I’m waiting for them to catch up

This category specifically summarises the views of participants who were quickly frustrated by the L21 committee process and wanted to get on with the changes that they wanted to make in their teaching.

These teachers had expressed initial excitement by the idea of creating more fluidity within their teaching practices and course structures and were frustrated by the slowness of the process.

“you don't need 2 years of investigating.. Nothing happened... I thought (L21) would make it happen”

“It's a stagnant process...I changed my committee.... same thing. ...talking a lot”

A theme that emerged from a cluster of participants was that they believed that they had been recruited with the intention and expectation of teaching with far more flexibility than they had been since starting to work at the school and were glad it was finally happening.

“It's taken this long for the school to become the place I thought I was coming to”

By the time of the second interview phase one participant described the L21 process as functioning in too beaurocratic a fashion to be conducive to the type of open inquiry that teachers were expected to carry out.

“While we were aiming for a personalised approach to education, the practitioners themselves were not allowed to work at their own pace. We are restricted by the pace of the people resisting progress. So we have to move at the pace of the slowest educator”

Being slowed down by individuals who resisted change was commented on by several participants

“It feels as though the institution was the thing that is being moved forward and not any of the people in the institution. So while some of us are ready to go, we are forced to move with the framework”.

Category 4: Uncertainty is left unsupported

This category concerns participants who supported the democratic discussion process, to varying levels, and found themselves caught in stalemates of indecision. The school had an established culture of collegial acceptance of different views and within this environment, the absence of authority over which direction to take would sometimes lead to a committee conversation stagnating or being left undecided.

“When I ask for direction from senior leaders, the response is always “we don’t know what it will look like””

“we realized then, with open-ended projects, that we need to agree what is essential for learning..but we haven’t agreed on that, so I’m not sure what we will do now”

There were concerns expressed that without clearer guidelines from senior leadership, the change initiatives would be unsustainable and that the end result would be different from what was originally envisioned, either by being too open-ended for students to learn effectively, or systematised to such an extent as to lose its value as a vehicle for engaging individuals.

“....Left without much guidance for teachers or students – a rudderless process...”

“Leadership are good people but...they themselves are not on the same page....it’s left to the teaching community to come to terms with it themselves”

Participants’ utterances included statements about senior leaderships’ active support and trust of teachers’ innovation within their own classrooms or school sections that came

under the direct remit of the senior leaders, within the normative hierarchy of positional leadership.

“They are good people but I don’t know what they do. They seem to keep going to meetings with their coffee cups.... but I like being trusted by them”

There was no evidence, however, of direction or clarification from these senior leaders about work within L21 committees. By the time of the second interviews, any narratives of pedagogical change was focused on small-scale endeavours rather than whole-school change. The L21 committee structure, by then, appeared to be separated from both the holistic narrative of changes taking place in the school and the pedagogical activities occurring day-to-day at a micro level of school interaction. One area where L21 committee action directly impacted teaching, at this stage, was the decision to alter teaching spaces in sections of the school; yet, the details of how teaching behaviours would be altered in these spaces were still a source of uncertainty and therefore discomfort for some teachers.

Two participants expressed dissatisfaction with the way that blocks of self-directed student learning had been introduced. “I was really disappointed...there were no expectations..we were just given groups of kids. No-one said, ‘that’s wonderful’ or ‘that could be better’. No-one asked ‘how can I support you’”

Every participant expressed, to a larger or lesser degree, the need for more clarity about the level of guidance that would be needed to support self-directed learning with the range of students in the school. Some teachers expressed this as waiting to be told. Others explained that in their professional roles, they had put forward suggestions to others including senior leaders, but as yet had no feedback and therefore did not know whether their understanding was in line with the school vision. Concerns were expressed that having an

overall vision of personalised education is not enough without a clear structure to support it.

“I fear that they might be romanticising individualism... but if they try too hard, it might become as process-driven as the system we are trying to escape”

“It’s like we just presume that students engage

This illustrates a mixture of restricted and emergent leadership that had reached a point where feedback was required to ensure work is aligned with school vision and work is not a waste of time. This idea is echoed in case-studies presented by Muijs and Harris (2007)

Although being trusted by senior leaders was expressed as a positive thing, twelve out of the fifteen participants expressed in various ways that this trust was a double edged sword as it led to lack of guidance and feedback. There was a general belief that without direct feedback on personal learning and pedagogy, teachers would not learn deeply or alter their practices.

“Without any feedback, all this won’t ultimately make a sustainable difference”

“School leaders need to institutionalise systems...need to collect data on how things are going. There’s no guidance or check-ins to find out how things are going and whether or not people are following up”

“You can have a structure, you can put in all kinds of unit plans you can have all kinds of a thing that looks good but without the attitude, that's a thing that looks good only. Yeah? People will go back to what they know... ‘cos teachers are busy.”

A number of participants expressed their feeling that school leaders had “too much trust” in teachers’ ability to cope with the added workload of planning new pedagogical strategies.

Category 5: My voice is lost and time is wasted

This category expresses the views of participants who felt that their time in the L21 committees was a wasted use of their time and that their ideas did not get heard.

There was a feeling expressed that there was a disconnect between senior leadership directives and the realities of on-the-ground teaching. Being placed in committees with people from all sections of the school meant that often discussions were decontextualized from participants’ own work. This was time consuming and took them away from the projects of change that they were either enthusiastic about as innovation or just needed to get done as creative aspects of their regular job. As teachers were expected to engage in innovation both within the classroom and in collaborative teams that had members outside their immediate spheres of work (for example, a grade 4 teacher innovating in her classroom may be involved in K-12 curriculum development in her L21 committee), there were narratives about being pulled away from work that was most important for change to take place.

‘no awareness ...a disconnect between what they think we have to do and the actual workload’

“Are people running on a treadmill and is the treadmill getting faster? Yeah. That's what I see a lot. Are we going anywhere? No. (laugh) so I’m really trying to... I’m really wanting us to hurry up and make some changes.... wanting us to talk small steps and become successful at that and then take some more small steps ‘cos its small steps... that's how evolution works”

Also, in the second year of data collection, all teacher leaders with formal positions of middle management responsibility were expected to chair an L21 committee, automatically doubling their responsibility in their eyes.

“I'm trying to create space where we can you know develop units, talk to one another about the kids in front of our..in front of us at a day to day level and I've seen that time being sucked away into meetings that are often agenda-less. And uh things like this and that's very very frustrating.”

“meeting where there's a show or repeat of what we've done or not moving things anything forward in any manner. They're quite annoying those meetings. Sometimes they're necessary, sometimes it's necessary to have a discussion about that point to gather ideas. I understand that. However, when you're... when I'm in a meeting like that instead of spending time with students and there's a deadline coming up that's not good for the kids' education”

Category 6: More show than substance

This category represents the most cynical view of the open-ended nature of school directives. Here it was expressed that the L21 process was a form of managerialism where decisions were really made at the top of the leadership hierarchy, in the guise of democratic decision-making. A few participants said that they felt that a large reason for initiating Learning21, was for 'the spectacle' and that it was a marketing tool initiated by school leadership to promote both the school and themselves.

“There are a lot of primed video and primed targets all dressed up as teacher-derived ..but they’re not constructed by the whole community”

“I don't deny that many leaders are genuine, but I sometimes get the feeling that the overall thing is a manipulative design by leadership. (L21) seems branded”

“It's about the spectacle rather than the outcome. The visibility is more important”

This view was voiced by one chair-facilitator and 2 teacher-members of L21 committees.

They acknowledged that certain aspects of the organisational change – such as flexible timetabling with student choice - was a positive way of raising the public profile of the school in a way that would attract students and their parents who specifically wished for this sort of education. However, they were also put off by the aspect of work that they believe is all smoke and mirrors, “a spectacle”, “flash” and express resentment at spending time doing this when what they want to do is be more creative in their classrooms or in their own teaching groups that they worked with day-to-day.

6.3.4 Summary of sense-making of roles and contributions to L21

One of the over-arching purposes of this thesis is to shine a light on how teachers’ attitudes towards organisational change are more complex than simply agreement or disagreement. This chapter illustrates how participants who are in overall agreement with the pedagogical changes in the school may experience frustration or dissent because they are unable to find a role or contribution in the change process that they believe is relevant to success. This raises the question of how teacher-leaders can be supported to understand different ways in which they can be agents of change.

All participants demonstrated enthusiasm for creating more opportunity for students to have more choice and ownership over what they learnt and how. It could be that in the absence, at the time, of a concrete decision-making about the form in which choices would be created for student learning, teachers at the school made sense of what they could do in their immediate sphere of control (Carpay et al, 2013). This then became the rationale for some for what they were doing, since there was no other cognitive hook from new experiences to draw from.

By the second phase of interviews, all participants expressed disappointed with the L21 process of organisational change. Some said that the changes were happening anyway, regardless of the time spent in Wednesday afternoon meetings, and that the meetings were a hindrance to the process as they were irrelevant to the work at hand. Some expressed annoyance at the implied message that innovation to meet each students' needs was a new idea. There was frustration with the culture of the committees where all voices being equal, the dissenting voices often prevailed and held back constructive discussion. With so many opinions and voices about which direction to follow, there was a general feeling among participants that there was a need for clearer, more precise direction for what was intended for the school.

6.4 Mapping teachers' engagement with organisational change

6.4.1 Introduction

As explained in the previous section, one of the aims of this research is to understand how teachers' engagement with organisational change is more complex than 'agreement or

disagreement' (Spillane et al, 2002). In this section, a model developed by Luttenberg et al (2013) is used as a mapping tool, to provide a way to understand the ways that educators' search for meaning enables them to bridge connections, not always in favourable ways, between changing aspects of their work, which defines the type of engagement they have with the changes. This engagement is both cognitive and behavioural and can be described here as a specific aspect of sense-making, which is to relate one's personal frames of reference with the expected and eventually experienced changes. The changes in participants' engagement, in this way, was mapped over the two phases of interviews.

As explained in Chapter 3, the horizontal axis of the framework developed by Luttenberg et al (2013) in Fig 3.3 provides a way to analytically discuss the extent to which new ideas fit with existing frames of reference. These frames of reference include snapshot memories as well as patterns of behaviours and processes within a persons' experience. The vertical axis represents the extent to which the new ideas are consistent (or match) with the participant's belief of what is appropriate or ideal for the change to be successful. Teachers' sense-making narratives can reveal engagements with the organisational change process that can be identified on this framework of analysis.

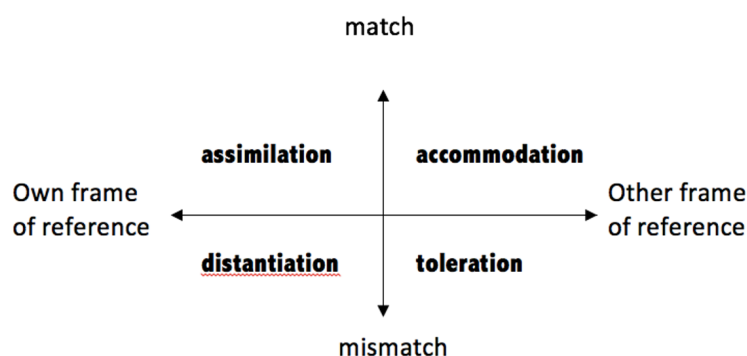


Figure 3.2 From Chapter 3 shown here for analytical reference.

The diagram shows two dimensions and four types of teachers' search for meaning of organisational change (Luttenberg et al, 2013)

By analysing participants' frames of references in two different phases over the two-year data-collection period, it was possible to identify the extent to which the focus of teachers' sense-making changed. More specifically, it showed how specific aspects of organisational change were embraced while other aspects were unnoticed, tolerated or rejected.

6.4.2 Summary of learnings

Analysis of teachers' sense-making of organisational changes, over two phases of data collection, led to the following presentation of findings of two areas of experiences:

- Engagement with new pedagogical practices and
- Engagement with the L21 process

6.4.2.1 Engagement with new pedagogical practices

The frame of reference – or in other words, the narrated conceptualisation of personalised education – of each participant was mapped against their understanding of the actual pedagogical changes they experienced during the 18-month period of data collection for this research. From this mapping, their engagement with the process is presented in this section.

A diagrammatic representation follows, of how teachers engaged with the proposed L21 pedagogical shifts in the two periods of data-collection.

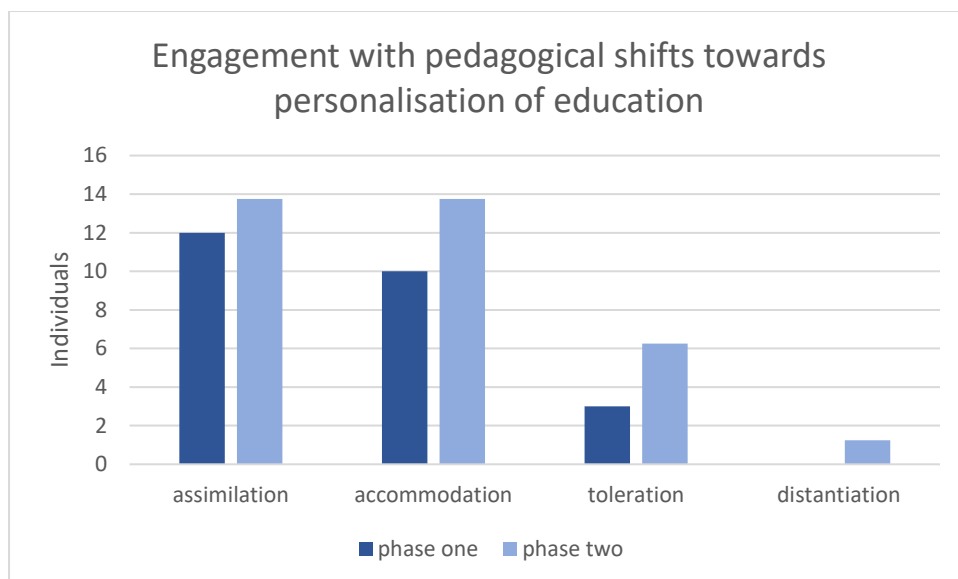


Figure 6.7: Engagement with pedagogical shifts

The first phase of data

During the time of the first phase of interviews, there was much enthusiasm expressed for increasing students' voice and choice in school, demonstrating that many participants were in alignment with the school's pedagogical vision, as they understood it. 10 out of the 15 participants who were interviewed at this time expressed engagement with new pedagogical directives in ways that can be mapped as both *assimilation*-with-*accommodation*. The former (assimilation) refers to integrating new ideas into existing practices and the latter (accommodation) refers to trying out new things, often giving up previous practices. So these participants were experimenting with pedagogical practices that were entirely new to them while also making some alterations to their older practices. As an example, a high school teacher described developing a new inter-disciplinary course with teachers from another department and offering an open-ended format of assessment where students decide a form of expressing their learning, with the support of multiple teachers. For this teacher, this was an example of *accommodation*, testing the water for a

format of teaching where they are not in direct control of the content, the pacing or the assessment style of the unit. At the same, other courses taught by this teacher exemplified *assimilation*, by either remaining unchanged or with a few added elements of weaker framing than practiced in the past.

Following Coburn (2005) and Spillane et al (2002), *assimilation* of change can occur for a number of reasons. It could be because teachers have practices that are already in line with the new way of doing things. Therefore, teachers may recognised a few practices that are new, are the next step in their existing routines, and integrate them into their existing teaching practices. On the other hand, it could be that they have simply misunderstood the underlying purpose of the change and therefore made superficial changes only, not altering their work significantly in line with change directives. Another reason for *assimilation* can be because teachers have simply chosen not to engage with large-scale changes to their practice. This was voiced as the case for the 3 participants whose engagement was noted as *assimilation-without-accommodation* and they all left the school within two years of the research. Each of these 3 teachers had expressed positive views about personalised education, but explained that the L21 process had reduced this enthusiasm. This idea will be covered further in the next section.

2 participants discussed examples of their teaching in ways that were almost entirely forms of *accommodation*, attempting new ideas or behaviours in either teaching or wider organisational work that were different to what they were accustomed to and in line with their beliefs of what the ideal change should be. These participants were generally working outside their comfort-zone in a way that was explorative, in the belief that this was a

positive thing to do. The examples of *accommodation* described by not only these 2 teachers, but also by other participants, were the teaching units, carried out over several weeks, when a middle school year group cohort and an elementary school year group cohort of students were taken off their usual scheduled timetable. Exercising weak framing of control over students' choice of movements and location, students and teachers of these year groups were not required to be in specific classes at set times, as would have been the case on a regular school day. With broad, overarching learning objectives as a guide, students set personal goals with mentors, chose which disciplines to engage in for varying lengths of time, and sought guidance from a selection of mentors as they saw fit. This challenged the familiarity of the roles of teachers as the main provider of structure and knowledge within a classroom. The teachers' behaviours shifted, during this time, to high levels of record keeping for students who were navigating their school days in less predictable ways, higher levels of mentoring and guidance to support decision-making about their day and also a high level of flexibility about how the next few days would be supported, depending on the projects developed by students.

During this same first phase of interviews, 3 participants could be described as in the *toleration* quadrant. They expressed doubts about either the proposed changes to student-teacher relationships in the classroom or the idea of students moving through courses at different paces. While they were unconvinced, they still attended collaborative meetings, explaining that they were "waiting to see what will happen". At this time, no participant described their views in ways that placed them in the *distantiation* quadrant.

The second phase of data

The analysis of each participant's narratives revealed that two years into the reform process, the majority of participants believed that although short units of teaching had been developed to provide more choice to students, their regular practices in teaching had not changed much. Narratives indicated that the classification of disciplines within courses and the format of assessment had become more flexible, but the framing of teacher-student interactions had not changed over the time period. The off-schedule experiences in the middle and elementary schools, that had been described with enthusiasm in the first phase, had not been repeated and teachers who had participated in them expressed some disappointment that those experiences had been reduced to ideas that were "discussed and considered with little change, other than attending more (L21) meetings".

A general opinion represented by participants was that they were trustfully left to their own devices within their classrooms and that this allowed freedom to try new things, but also meant that they tended to revert to old ways of doing things. Spillane et al (2002) and Coburn (2005) indicate there is evidence that after initial period of changed behaviour, pedagogical practices in schools can often revert back to the familiar. While some participants indicated that this was the case for them, I suggest that participants' frames of references could have shifted over the time between interviews and therefore what used to be described as *accommodation* to them now was discussed as *assimilation*. So while teachers believed their teaching practices had not changed, it could be that they had indeed shifted to an extent, but participants had become accustomed to the changes and we not experiencing as much of a challenge to trigger sense-making.

Even though a larger number of participants than in the first phase reported activities that correspond to accommodation and assimilation, most explained that this was as a result of changing systems in the school – such as flexible choices of lessons on the 9th day of the school rotation - rather than actual changes to the way that they teach students. Some of these teachers explained that they went along with the changes taking place, but were doubtful of the success of this change in adding value to students' learning (*toleration*).

The reasons for this were explained, by 3 participants, as due to too little validation, from senior leaders, of the innovation carried out so far during the L21 process. 2 of these participants explained that they had hesitated to initiate new ideas as they had not, as yet, received feedback from senior leaders about what was already working well in the school. In various ways, they explained how this was demoralising or frustrating since some of their work had been unnoticed by senior leaders. The feeling was that “goodwill has been corroded” and that while they would like to try out new teaching projects, they believed their previous innovation was not recognised. “I don't want to spend time on something...its planning time and so much more .. and then find out it wasn't what they wanted or doesn't fit”.

One participant expressed frustration that a high school course that they had designed, in line with student-centred learning where the curriculum content is entirely chosen by students, had been celebrated during a whole-school meeting as a result of L21. This participant expressed annoyance that it had not been acknowledged that this progressive

approach to education had existed in the school before the L21 process had begun and that this had led them to withdraw from the process (*distantiation*).

One participant, who was also a parent of students at the school described how her children expressed frustration with self-directed time, saying that they wished they had more direction and “could just do their homework”. This was disappointing for this participant as they believed the success of lessons depended on the the skills and understanding that teachers may have of the self-directed learning process, which in itself was still somewhat a mystery, and that senior leaders were not supporting them with sufficient training. This participant had engaged in different ways over the two phases, with narratives indicating some of each quadrant.

The same participant was also concerned that, in their L21 committee, there was a greater emphasis on mathematics curricula and less on the social-emotional development of students that they believed was more relevant to personalised education.

Maths could end up being about going from stage to stage in a structured way but is that deep learning? Personalisation could be better through natural groups and rich conversation. Logistics is hard when we want to create phases and movement by developmental stage and still retain constructivist deep learning.

11 participants did, however, talk about a shift in what was generally regarded as normative processes in the school. They explained in different ways that the introduction of flexible units and scheduling had altered the ways in which teachers planned their time and created a different focus of discussions within and outside the L21 committee process. These same people also expressed doubt that the pedagogical changes they were hoping for would

reach all parts of the school, since they were aware that many different viewpoints were being discussed about the direction that large-scale changes would take place.

One example is the idea of removing separate classrooms and replacing them with open-plan teaching spaces, with easily moveable furniture and inspiring areas for different types of learning activities. By the time of the second phase interviews, it had been agreed that some selected areas of each section of the school would be converted in this way and that, the following year, the teaching in some areas would adapt accordingly. While senior leaders described these as pilot spaces and that the intention was for this to be more widespread in the school, most teachers expressed doubt that the pilot spaces would demonstrate sufficient benefit to lead to a more widespread conversion of the school to open-plan spaces. Therefore, while some teachers were *accommodating* the changes associated with these changes, there was an element of *toleration* of some of the larger ideas and planning.

Similarly, one participant was a learning support teacher who believed strongly that personalisation of education requires a clear understanding of each students' cognitive and social developmental stages and that this should be monitored and mentored, influencing the learning choices of each student at the school, not only those on the student-support register. She explained that despite her L21 committee work in this area, she also believed that learning support teachers would continue to "work in fragments of the school" and that the focus of wide-spread personalised education would instead be based on grasping mainstream curriculum knowledge. So while her work had initially been that of *accommodation*, it had shifted to *assimilation* of systems for which she had less enthusiasm.

Another teacher, in the high school, explained how some of their colleagues “resist any change at all..they want things to stay the same...and people let them” and how this was restricting wider changes that were envisioned in the school.

Summary of this section (engagement with pedagogical change)

Teachers’ enthusiasm and active innovation in pedagogical changes had waned to an extent by the time of the second phase of interviews. As the school systems were evolving, teachers’ roles and activities in teaching had changed in some areas of the school, and as a developing, shifting culture, this could be a transitional phase of uncertainty (Bunnell, 2020) which would take some time to overcome. Teachers had initiated or participated in grass-root level innovation according to their understanding of personalised education and in this way, an emergent form of teacher-leadership for pedagogical change is evident (Muijs and Harris, 2007). While some participants expressed aspects of a restricted form of teacher-leadership, wanting explicit guidance before trying out new ideas, in general, most had tried out new approaches to teaching over a year before reaching that point. During the second phase of interviews these participants felt they had reformulated their teaching practice to an extent and wanted to continue with changes only with stronger framing from senior leaders and with a clearer classification of pedagogical structures and techniques. Only one teacher, at this stage said that they were still “content to keep repackaging my ideas, rethink and change them again...I’m comfortable with that”.

6.4.2.2 Engagement with the L21 process

Much of the enthusiasm and frustration expressed in the interviews related to the structure and process of L21 that had been set up by senior leaders. As described earlier, this included L21 committees and an over-seeing steering committee. A section of engagement with the organisational change process therefore focuses on the L21 process and opportunities it made available to enact change.

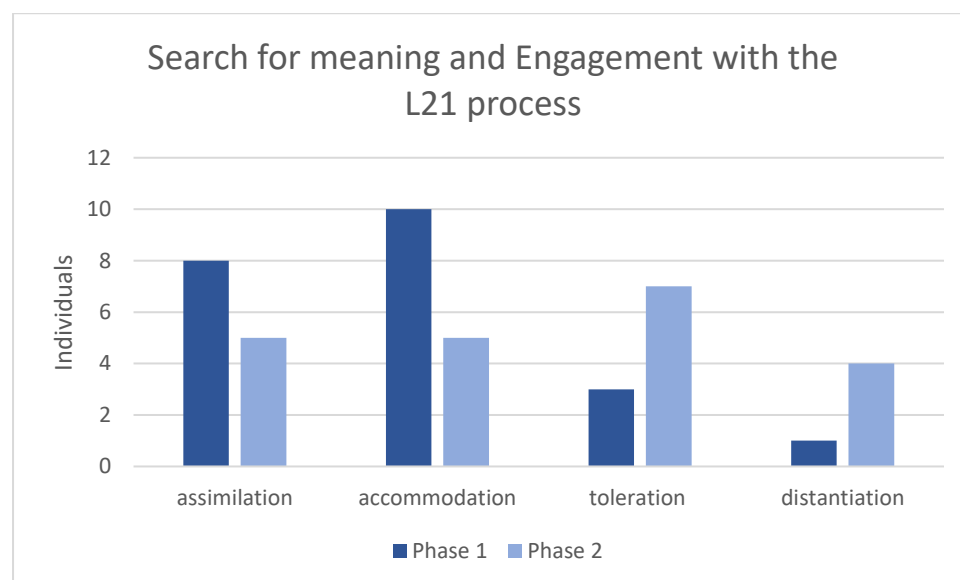


Figure 6.8: Engagement with L21 process

It was strikingly clear, through interview narratives that interest and confidence in the L21 process had declined over the 18-month period of the research. The L21 committee structure represents a way of organising teachers into collaborative groups that has a relatively strong classification. The focus of discussions within the committees, however, were loosely classified by senior leaders when expressing the L21 vision and this led to a variety of sense-making beliefs of the effectiveness of the L21 process.

Accommodation represents a type of engagement with new ideas and behaviours and an openness to discarding old ways. During the first phase, there was high engagement from 10 out of 15 participants, expressing varying levels of interest, faith and enthusiasm in working with L21 committees.

3 participants, in particular, expressed an appreciation that the committee engagement was intended to develop the strategies to ultimately lead change. Their utterances revealed that they expected the process to reveal gaps in school systems that would lead to further work.

“This is not going to be a linear process. It’s going to be messy”

“We are exploring all ecosystems. Not one piece of it. all pieces. Constantly shifting – regular meetings, pause then reformatting.

“I have trust and faith in the....in the administrators here. They are transparent..

there’s got to be a plan...perhaps I’ll address that ah.. soon. And I’m waiting for that conversation..”

This dwindled to half the number of people by the second phase out of which most participants still trying out new ideas to further L21 work in the wider school community also expressed feelings of *toleration* of the change process. Reasons for this are explained at a later stage in this section.

The 4 people who, in the first phase, described mixed features of assimilation-toleration for the L21 process, shifted further towards toleration-distantiation by the time of the second

phase. These participants either attended some L21 committee meetings and found them uninspiring, or else attempted to create alternative work for themselves outside the regular L21 framework that was more relevant to their own work. The latter, explained that they did not recognise a valid purpose of the committee meetings and believing in good faith that they were contributing more by working on their own projects and supporting the school's vision in a broad sense, in a form of what Supovitz (2018) describes as organic leadership, with a focus on collegial relationships and non-positional influence. This demonstrates emergent leadership (Muijs and Harris, 2007) in line with personal values, even though there was *distantiation* from the quasi-formal structure set up for creating new practices in the school.

As a consequence, by the time of the second phase of interviews, *toleration* and *distantiation* had increased towards the L21 process of committee work, while *assimilation* and *accommodation* of the process decreased. This can be contrasted with the approach that participants had towards pedagogical engagement, which had increased for all four quadrants by the second phase. This indicates that while teachers engaged in a variety of ways with shifts in pedagogy over the 18-months of research, this was not necessarily as a result of productive democratic collaboration in L21 committees, but rather through organic teacher-leadership (Supovitz, 2018) in their own area of teaching.

This notion was expressed in particular by 4 people can be identified with accommodation-toleration. These participants expressed frustration that while they were continuing to work within the L21 committee process (accommodation) and were in agreement with the philosophy of personalised education and overall strategy of

democratic decision-making, they were frustrated with the limitations of their own roles.

Two participants who were chair-facilitators described their committee work to be unfulfilling as “even as a chair, I can’t control the pace...I’m told to slow down and I don’t enjoy talking about the same things again and again” and “a lot of valuable ideas just got lost along the way”.

As another example of mixed agreement with different aspects of change, one participant worked in an L21 committee to develop ideas about student mentorship. They saw this as integral to the process of students developing skills and voice to further their own learning pathways during and beyond in their school career. For this instance, their ideas can be identified as accommodation quadrant. On the other hand, they express frustration at the slowness of the pace at developing the mentorship process and the lack of clear communication as discussions continued. They explained that teachers were losing faith in the process because there was no voice of authority to make a decision when there was a difference of opinions and therefore the process of discussion and decision-making lost its momentum. For this process of decision-making and teacher-leadership for the L21 process, therefore, they identify with the tolerance quadrant, eventually adopting the implementation strategies that they did not agree with.

Some participants who strongly agreed with the 9th day as an opportunity to choose large blocks of time for an activity also, at the same time, believed that the lack of direction, from senior leaders, for some learning blocks were a bad use of time. They developed their own strategies within their own classrooms at other times (assimilation) and therefore represented toleration with some frustration and doubt.

As explained earlier, reasons for participants shifting into the toleration quadrant was often because of demotivation through lack of clarity of where the school decisions were heading, as this restricted their own decision-making. This is consistent with the explanation proposed by Supovitz (2018) for why teacher-leaders with quasi-formal positions have limited ability to support change, as they have legitimacy yet no authority to assert their decisions widely. Muijs and Harris (2007) describe similar moments of teacher-leadership where moral support and guidance from senior leaders is necessary to ensure the continuity of work carried out by teacher-leaders. With similar comments of needing more guidance, 2 participants were entirely in the toleration-distantiation quadrant by the second phase and one participant who had been very enthusiastic about the L21 change process during phase decided to not participate in the second phase.

The 6 participants who retained approaches of accommodation, by the second phase, spoke about obstacles to building consensus or making-decisions, but hoped that in time they would, as a school, be able to overcome these issues. These participants had a sense that the L21 process was also evolving and that senior leaders would, in time, find more ways to support individuals who are positive about the changes to be made.

Summary of this section (engagement with the L21 process)

Spillane et al (2002), *inter alia*, build a case for understanding why individuals and groups who actively work hard at change initiatives may nevertheless develop a range of understandings and actions which might impede the progress of change initiatives.

Interestingly, rather than being for or against, there is a tendency to be in a different quadrant depending on whether the issue is about pedagogical issues of personalised education or the implementation of it.

Some participants commented on wider changes taking place in the school, even if it did not apply to them directly. Many participants, however, did not discuss successful changes in the school that had been shared in whole-school meetings, focusing instead on the areas of frustration and success that they had experienced. Carpay et al (2013) reflects this sense-making by discussing how actors seek solutions, during organisational change, within their own work context, often ignoring aspects of reform that are inter-dependent on their work, but not directly visible to them. This can mean that educators can be stuck in their own context of work without seeing the larger picture or relevance to other members of their interconnected learning community.

Coburn (2005) explains how even when in general agreement with the overall idea of the change being implemented, teachers are more likely to implement change if the policy messages for change relate to changes in their normative day-to-day work actions of the classroom. Similarly, teachers were less likely to implement aspects of policy if there is a perceived distance to the practicalities of their work, or a sense of being too abstract.

Chapter 7

Conclusion

7.1 Introduction

This research extends theory of teacher-leadership within democratic settings by focusing on the perspectives drawn from teachers' sense-making, discussing the multifaceted ways in which teachers' agreements, disagreements and beliefs overlap and contradict. Through phenomenographic data analysis methods, variations in teachers' understandings of the school vision and how they could work to develop these changes revealed the structures and ideas that were underlying and impacting sense-making. Guided by the views and beliefs that emerged from interview narratives, these structures and ideas were discussed using Bernstein's (2000) pedagogical device and analytical categories of teacher-leadership (Supovitz, 2018; Muijs and Harris, 2007). Furthermore, using an analytical method previously used in a different setting of school reform (Luttenberg, et al, 2013), teachers' ongoing engagement with the change process was analysed using sense-making concepts involving teachers' frames of reference.

7.2 Significance of Findings and Analytical Methods

This section discussed the contributions that this research makes to wider literature in the field of teacher-leadership. This research provides empirical examples and insights into the nature of teachers' experience of leading within their professional roles, within a democratic approach to collaborative design and decision-making. At the same time, the methodology explores the idea of researching sense-making through phenomenographic

analysis and, in addition, viewing sense-making as part of the process of re-contextualisation, which is an aspect of Bernstein's (2000) pedagogical device. The contributions of this research, through findings and analytical methods, are as follows.

7.3.1 Significance of findings

Insights from several aspects of teacher-leadership in democratic settings are presented here.

The highs and pitfalls of a democratic committee structure

Senior leaders had set up a committee structure dedicated to the discussion, design and delivery of changes in line with the vision for organisational change. By making it compulsory for teachers to participate in this structure, and describing the aims of open-discussion within these committees, a structure was created to enable democratic decision-making. Senior leaders also refrained from providing direct guidance beyond broad targets for the vision the school would be taking and expressed the need for teachers to lead the identification of issues and solutions by applying their skills and experience in forms of teacher-leadership.

The findings indicate that although the school's culture of open discussion encouraged the sharing and exploration of personal beliefs, and in some cases, teachers were able to create grass-root initiatives of pedagogical pilot programmes, or contribute to projects that had tangible solutions, such as choosing the design for a learning space. For most participants, however, the structure of planning committees (L21 committees) for change did not provide clear enough avenues for communicating ideas towards constructive action. Also, for many

teachers, the contexts for discussion within the L21 committees felt removed from their own interests in innovation since they focused on the whole school rather than their specific day-to-day application of pedagogy. Working with people outside immediate work context was felt to be defocusing. Within collaborative teams that included teachers from different sections of the schools, and therefore not within teachers' usual work context, there was a different challenge of sense-making to find out what one's personal contribution could be. While umbrella concepts for discussion were provided, teachers brought a variety of attitudes, values and experiences to the table and there was, at times, a stale-mate in deciding what to focus on. Teachers' individual 'stance' or sense of how their role could be within the committee and outside the committee influenced the extent to which their leadership was emergent (Hunzicker, 2014; Muijs and Harris, 2007) and contingent to the situations presented. This indicates that further clarity was needed about both the pedagogical routes the school was willing to take and also the scope of authority teachers had in decision-making.

Muijs and Harris (2007) and Timperley (2005) similarly indicate that teachers are best able to navigate different forms of emergent leadership when senior policy makers provide coaching and guidance in how to do so. Gastil (1994) also indicates that when roles in leadership are blurred without distinct purposes assigned, democratic leadership may lead to incompleteness of goals.

Clarity of purpose is needed within a democratic approach

When teachers' expertise is expressed in an open form of discussion, the nuances of differences of opinion of pedagogy may not be clear to administrators who are not

grappling with the same issues. Nevertheless, clarity of purpose is clearly required, as seen in the case-study, when peer-colleagues are in strong disagreement of the ways in which teaching and learning will take place.

Most teachers in the school wanted weaker framing in their classrooms. However, not all teachers wanted it all the time. And not all teachers wanted this alongside weak classification of their subjects. Some teachers did not want the framing or classification to be weaker at all, however, they were active in developing their personal mentorship of their students by giving them time in small groups or individually and in this way further personalised their students' education. It was unclear whether it was acceptable to have different levels of framing in student-teacher relationships during lessons across the school, or whether there was an expectation that all teachers would collectively be expected to provide online versions of their courses and supervise students' learning in teams without specific guidance during lessons, and only through mentoring time. At this point of the L21 process, there was a need for clarification of direction of what was acceptable or unacceptable, pedagogically, within the schools' vision of. The scope of L21 committee leaders' roles was also unclear and weakly classified when described by senior leaders. Therefore, some teacher-leaders, who had less disagreement within their committees were able to move ideas forward, while others did not. A possible solution could have been for teacher-coaches to be assigned, in improvised positions of leadership (Supovitz, 2018) who also had the authority to make decisions.

Authority can be established within a democratic work setting

Chair-facilitators of L21 committees felt that their authority to determine the pace and purpose of the committees was limited. While there were specific times near the end of the academic year when certain decisions were made, with the guidance of senior leaders, throughout the progress of discussions during the year, there were additional moments when it was strongly suggested, in interview narratives, that senior leaders' guidance and active decision-making could have provided purpose and supported progress.

Taking a close at the nature of teacher-leadership, however, it was clear that some teachers were able to position themselves with the stance of greater authority, influence a wider range of people and promote personal ideas and proposals further than others. These teachers were also more likely to use multiple forms of leadership styles and techniques. For teacher-leaders who may find themselves hovering between levels of positional hierarchy in their schools and with a more-or-less equal authority footing with most of their peers, this ability to compartmentalise aspects of their work and apply different modes of communication, and varying levels of persuasion and personal investment can be described as hybrid leadership (Gronn, 2009) and, as explained in the literature review, is often a key determinant for successful teacher-leadership. Teachers who work in this way can be coached and trained to develop an awareness that multiple forms of teacher-leadership behaviours exist, some with greater decision-making power than others, and that these behaviours can be chosen situationally.

7.3.2 Significance of Analytical Method

The significance of using phenomenography and the analytical framework to understand ways in which teachers made sense of organisational change and their roles is as follows.

Applying phenomenographic analysis to teachers' sense-making narratives provided categories for further analysis

By using phenomenographic methods of analysis, my focus was on finding categories that represented variations of views, while also identifying dimensions to describe these differences. Since sense-making narratives, by definition, focus on selective aspects of teachers' experience, aspects of organisational change held specific meaning to them, these narratives were by no means representative of all aspects of organisational change.

However, since the focus was on teachers' subjective experiences, a sense-making focus was ideal, as was an analytical method for emergent categories of variation. The process of re-reading and re-grouping interview data with the purpose of finding patterns of difference also, in turn, provided the emergent insights from where concepts for the second stage of analysis could be identified. These concepts provided a theoretical basis for further analytical discussions to take place.

The analytical framework illustrated the structures that shifted ideas of what is to be known and done

Teachers were tasked with re-contextualising the broad vision and targets of organisational change into collegial work practices in committees as well and also into how students would

be taught and how they would learn. Teachers were therefore making sense of what should be known and done by students and also by teachers, inside and outside the classroom.

The research evidence demonstrates how structures in education, both cognitive and physical, can impact the ongoing sense-making, expectations and experience of work and change enactment in schools. Here, cognitive structures include the framing of a school vision and ongoing framing of progress of organisational change. Physical structures include the development of a committee system specifically for organisational change (L21 committees), the addition of a flexible scheduled day in the schools' timetabling rotation and the alteration of physical teaching spaces, by creating common spaces for learning with moveable furniture and props for creating unique learning spaces. These are all vertical discourses of knowledge which were iteratively guiding and being guided by horizontal discourses of knowledge.

The sense-making narratives, when analysed using the analytical framework, revealed structures that were classified and framed in ways that altered the context of what was learnt and how. Following Bernstein's (2000) theories of re-contextualisation, these structures lead to shifts in consciousness and ways of knowing what there is to know. The analytical framework made these symbolic and physical structures visible.

7.3 Limitations and suggestions for further research

First I acknowledge limitations that are commonly associated with a single case study. I acknowledge that while the development of teacher-leadership is of wide interest in schools, not all organisations have the approach of creating open-ended targets with 5-

years to fulfil the school vision, through the expertise of teachers. Secondly, I relied on the data from interviews and participant observations over a period of 18-months, which was during the first 3 years of the 5-year organisational change process. Therefore, I was able to research a limited time period in the midst of ongoing changes, and did not include any outcomes that followed afterwards. Thirdly, while I validated my interview data by sharing transcripts with individual participants for validation, I was a lone researcher and therefore, I relied on my own behaviours of reflexivity for my interpretations and iterative development of data-analysis.

It is important to note that this study focused exclusively on the sense-making perspectives of teachers and how they selectively viewed aspects of the school vision and the nature of teachers' interactions, as leaders of change, with the change process. The perspectives of senior leaders who initiated the organisational change process and provided the initial broad vision, was not included, as it is not the focus of inquiry. Therefore, this thesis does not make claims about school leadership as a whole, within the school, but instead, only the nature of teachers' experience of negotiating their work and roles, and how ideas and structures for change could impact this experience.

The analytical framework presented in chapter 3 and used for the second stage of data analysis was guided by the insights that emerged from the differences in perspectives found in the interview data. The framework provide analytical concepts based on literature that recognises the nuances of organisational change in terms of teachers' perspectives of curricula, pedagogy and ways of asserting leadership. While these ways of describing teacher-leadership, within this literature, covers important aspects of teachers' beliefs and

constraints, it does not provide a framework for discussing the ongoing development of teacher-leadership traits over time. Some contemporary research does tackle that aspect of teacher-leadership, and I would suggest this as a possible extension to further research on teachers' sense-making in schools.

The changes in teachers' sense-making perspectives over the 18-month period was a focus of the research. However, the analytical framework was developed over the final 6 months of data collection and through the iterative process of reading transcripts and analysing data. The analytical framework provided the beginnings of an insightful view of how guidance from senior leaders can be framed to create a democratic environment for teachers to innovate. It also provided insight to the ways in which teachers understood progressive forms of education. This analytical framework could be used in alternative settings to monitor the ongoing changes in teachers' relationship with educational reform and highlight moments when coaching or intervention is needed to support teachers both in how to assert their leadership and also in better understanding the purpose of organisational change. In this way, teacher-leadership and its ongoing development can take centre-stage in organisational change, as a key conduit for sustainable change and capacity building within a school's organisation.

References

- Alvesson, M., 2003. Beyond Neopositivists, romantics and localists: a reflexive approach to interviews in organisational research. *Academy of management Review*, 28(1), 13-33
- Apel, K.O., 1972. The a priori of communication and the foundation of the humanities. *Man and World*, 51, 3-37
- Appelbaum, S. H., Habashy, S., Malo, J and Shafiq, H., 2012. Back to the future: revisiting Kotter's 1996 change model. *Journal of Management Development*, 31 (8)
- Barth, R. S., 1988. *Principals, teachers and school leadership*. Phi Delta Kappan, 69(9) 639-42
- Ball, S.J. and Nikita, D.P., 2014. The Global Middle Class and School Choice: A Cosmopolitan Sociology. *Zeitschrift fur Erziehungswissenschaft*, 17(3), 81-93
- Beaulieu, R., 2017. Phenomenography: Implications for expanding the educational action research lens. *Canadian Journal of Action Research*, 18(2), 62-81
- Bernstein, B., 1971. On the classification and framing of educational knowledge, In: Young, M., ed, *Knowledge and Control: new directions for the sociology of education*, London, Collier Macmillan, 47-69
- Bernstein, B., 2000. *Pedagogy, Symbolic Control, and Identity: Theory, Research, Critique*. Revised ed. Lanham, Maryland: Rowman & Littlefield
- Black, K., 2010. *Business Statistics: Contemporary Decision Making*, 6th edition, John Wiley & Sons
- Bolstad, R., Gilbert, J., McDowall, S., Bull, A., Boyd, S. and Hipkins, R., 2012. *Supporting future-oriented learning and teaching – A New-Zealand perspective*. Ministry of Education commissioned report from NZCER.
- Bunnell, T., 2008. International Education and the 'Second Phase': A framework for conceptualizing its nature and for the future assessment of its effectiveness. *Compare: A Journal of Comparative and International Education*, 38 (4), 415-426
- Bunnell, T., 2020. The continuous growth and development of 'International Schooling': the notion of a 'transitory phase'. *Compare: A Journal of Comparative and International Education*, 1-5, Routledge
- Burns, J.M., 1978. *Leadership*, New York, Harper & Row
- Cambridge, J., 2011. The IB diploma programme as pedagogic discourse. In: Hayden, M. and Thompson, J.J., eds. *Taking the IB Diploma Programme Forward*. Woodbridge, John Catt Educational, 65-76

Carpay, T., Luttenberg, J., Vueglers, W. and Pieters, J., 2013. Harmony and disharmony in an educational reform concert: towards a Parsons' inspired dynamic model of tuning. *Journal of Curriculum Studies*, 45(6), 814-837

Coburn, C.E., 2005. The Role of Non-system Actors in the Relationship Between Policy and Practice: The Case of Reading Instruction in California. *Educational Evaluation and Policy Analysis*, 27(1) 23-52

Codd, J.A., 1988. The construction and deconstruction of educational policy documents. *Journal of Educational Policy*, 3, 235-247.

Collier-Reed, B. and Ingerman, A., 2013. Phenomenography from critical aspects to knowledge claim. In: Huisman, J. and Tight, M., eds. *Theory and method in higher education research*. Emerald Group Publishing Ltd, Bingley, 243-260

Collins, J., Hess, M.E. and Lowery, C.L., 2019. How teachers establish and sustain democracy and education in their classrooms, *Democracy and Education*, 27(1)

Cooper, K.S., Stanulis, R. N., Brondyk, S.K., Hamilton, E.R., Macaluso, M. and Meier, J.A. , 2016. The teacher leadership process: Attempting change within embedded systems. *Journal of Educational Change*, 17, 85-113

Crowther, F., Ferguson, M. and Hann, L., 2009. *Developing Teacher Leaders: How Teacher Leadership Enhances School Success*, London: Sage

Csikszentmihalyi, M., 1990. *Flow: The Psychology of Optimal Experience*, Harper & Row

Dahlin, B., 2007. Enriching the theoretical horizons of phenomenography, variation theory and learning studies. *Scandinavian Journal of Educational Research*, 51(4), 327-346

Damkuvienė, M., Valuckienė, J. and Balciunas, S., 2019. Teacher leadership for organizational change, *Management*, 24, 37-53

Dasborough, M., Lamb, P. and Suseno, Y., 2015. Understanding emotions in higher education change management. *Journal of Organisational Change Management*, 28(4), 579-590

Davis, B. and Harre, R., 1990. Positioning: The social construction of selves. *Journal for the Theory of Social Behaviour* , 20 (1), 43-63

Dewey, J., 1938. *Experience and Education*, Macmillan, New York

Diamond, J. B., and Spillane, J. P., 2016. School leadership and management from a distributed perspective: A 2016 retrospective and prospective. *Management in Education*, 30, 147-154.

Donaldson, G., 2010. Teaching Scotland's Future: Report of a Review of Teacher Education in Scotland. Edinburgh: Scottish Government

Durrant, J. and Holden, G., 2006. *Teachers Leading Change: Doing Research for School Improvement*, London: Paul Chapman

Fullan, M., 2007. *The New Meaning of Educational Change*. Abingdon: Routledge

Gadamer, H.G., 1994. *Truth and method* (Sheed and Ward Ltd, Trans). Berkley: University of California Press

Ganon-Shilon, S. and Sechter, C., 2017. Making sense of school leaders' sense-making. *Educational Management, Administration and leadership*, 45(4), 682-698

Gastil, J., 1994. A Definition and Illustration of Democratic Leadership, *Human relations*, Thousand Oaks, CA: SAGE , 47 (8), p.953-975

Gatto, J.T., 2009. *Weapons of Mass Instruction: A Schoolteacher's Journey Through the Dark World of Compulsory Schooling*. New Society Publisher

Gawlick, M. A., 2014. Shared sense-making: how charter school leaders ascribe meaning to accountability. *Journal of Educational Administration*, 53(3), 393-415

Giorgi, A., 1992. *The theory, practice and evaluation of the phenomenological method as a qualitative research procedure for the human sciences*. Quebec, Canada: Universite du Quebec a Montreal

Goleman, D., 2000. Leadership that gets results. *Harvard Business Review*, March - April, 78-90

Gordon, C., 2015. Framing & Positioning, In: Tannen, D., Hamilton, H.E. & Schiffirin, D. eds. *The Handbook of Discourse Analysis*, John Wiley & Sons

Griffin, G.A., 1995. Influences of Shared Decision Making on School and Classroom Activity: Conversations with Five Teachers. *The Elementary School Journal*, 96, 29-45

Gronn, P., 2009. From Distributed to Hybrid Leadership Practice. In: Harris. A, ed. *Distributed leadership, Studies in Educational leadership*, New York, Springer

Guerrero, J.M., Teng-Calleja, M. and Hechanova, M.R.M., 2018. Implicit change leadership schemas, perceived effective change management, and teachers' commitment to change in secondart schools in the Philippines. *Asia Pacific Education Review*, 19, 375-387

Gunter, H., 2004. Labels and labelling in the field of educational leadership. *Discourse: Studies in the Cultural Politics of Education*, 25 (1), 21-42

Hammersley, M. and Atkinson, P., 2009. *Ethnography: Principles in practice*, London and New York, Routledge

Hargreaves, A., 1998. The emotions of teaching and educational change. In: Hargreaves, A., Lieberman, A., Fullan, M. and Hopkins D., eds. *International Handbook of Educational Change, Part 1*, Dordrecht, The Netherlands, Kluwer, 558-575

Hargreaves, A., 2009. Foreword. In: Crowther, F., Ferguson, M. and Hann, L. *Developing Teacher Leaders: How Teacher Leadership Enhances School Success* (2nd ed). London, SAGE, vii-viii

Harris, A., 2008. Distributed Leadership: What We Know? *Journal of Educational Administration*, 46 (2), 172-88

Harris, A., and Muijs, D., 2003. *Teacher Leadership: principles and practice*, London, National College for School Leadership

Harris, A. & Spillane, J. P., 2008. Distributed leadership through the looking glass. *Management in Education*, 22(1) 31-34

Hayden, M. and Thompson, J., 2016. International schools : the developing agenda . In: Hayden, M. & Thompson, J., eds. *International schools : current issues and future prospects*, 2^{edn}, vol. 26, Oxford Studies in Comparative Education, Oxford, Symposium Books, 9-16

Herold, B., 2017. Personalized learning: a cautionary tale, *Education Week* online, Available from: <https://www.edweek.org/ew/articles/2017/07/19/personalized-learning-a-cautionary-tale.html> (Accessed 1st December 2019)

Herscovitch, L. and Meyer, J.P., 2002. Commitment to organizational change: Extension of a three-component model. *Journal of Applied Psychology*, 97(3), 474-487

Hordern, J., 2017. Bernsetin's sociology of knowledge and education(al) studies. In: Whitty, G. & Furlong, J. *Knowledge and the study of education: an international exploration*. Didcot: Symposium, 191-210

Hunzicker, J., 2017. From Teacher to Teacher Leader: A conceptual model. *International Journal of Teacher leadership*, 8(2), 1 – 27

Ireland, J., Tambyah, M.M., Neofa, Z. and Harding, T., 2009. *The tale of four researchers : trials and triumphs from the phenomenographic research specialization*, In: AARE 2008 International Educational Conference, 30th Nov – 4th Dec 2008, Queensland, Australia

ISC (International School) Research, 2020. Available from <https://www.iscresearch.com/services/market-intelligence-report/china-mir> (Accessed 10th July 2020)

Jarvella, S., 2006. Personalised learning? New Insights into Fostering Learning Capacity. In: *Personalising Education*, Paris, OECD/CERI

Ketelaar, E., Koopman, M., Den Brok, P.J., Beijard, D. & Boshuizen, H.P.A., 2014. Teachers' learning experience in relation to their own ownership, sense-making and agency. *Teachers and teaching*, 20(3), 314-337

Kilicoglu, D., 2018. Understanding Democratic and Distributed Leadership: How Democratic Leadership of School Principals Related to Distributed Leadership in Schools? *Educational Policy Analysis and Strategic Research*, 13(3), 6-23

Kotter, J.P., 1995. Leading change: why transformation efforts fail, *Harvard Business Review*, March-April, 59-67

Larsson, J., Holmstrom, I., Lindberg, E. & Rosenqvist, U., 2004. Trainee anaesthetists understand their work in different ways: implications for specialist education, *British Journal of Anaesthesia*, 92 (3) 381-7

Larsson, J. & Holmstrom, I., 2007. Phenomenographic or phemomenological analysis: does it matter? Examples from a study on anaesthesiologists' work. *International Journal of Qualitative Studies on Health and Well-being*, 2(1), 55-64

Laurie, M., 2020. Recontextualising Twenty-first Century Learning in New Zealand Educational Policy: The Reframing of Knowledge, Skills and Competencies. *New Zealand Journal of Educational Studies*, 55, 113-128

Leithwood, K., Mascall, B., Strauss, T., Sacks, R., Memon, N. & Yashkina, A., 2007. Distributing Leadership to make schools smarter: Taking the ego out of the system. *Leadership and Policy in Schools*, 6 (1) 37-67

Leithwood, K., Mascall, B. & Strauss, T., 2009b. What we have learned and where we go from here. In: Leithwood, K., Mascall, B. & Strauss, T., ed. *Distributed Leadership According to the Evidence*. London: Routledge, 269-281

Limberg, L., 2008. Phenomenography. In: Given, L., Ed. *The SAGE encyclopedia of qualitative research methods*. Thousand Oaks, CA: Sage. 612-615

Lincoln, Y. S. and Guba, E. G., 1985. *Naturalistic Inquiry*. California, Sage.

Lo, M. L., 2012. *Variation theory and the improvement of teaching and learning*. Actis Universitatis Gothoburgensis, Goteborg

Lukacs, K. S., 2009. Quantifying 'the Ripple in the Pond': The Development and Initial Validation of the Teacher Change Agent Scale. *The International Journal of Educational and Psychological Assessment*, 3, 25-37

Lukacs, K. S. and Galluzzo, G. R., 2014. Beyond empty vessels and bridges: toward defining teachers as the agents of school change. *Teacher Development*, 18 (1), 100-106

- Lumby, J., 2013. Distributed leadership: The uses and abuses of power. *Educational management Administration and leadership*, 41(5), 581-597
- Luttenberg, J., van Veen, K. & Imants, J., 2013. Looking for cohesion: the roles of search for meaning in the interaction between teacher and reform. *Research papers in Education*, 28(3) 289-308
- Macbeath, J., Oduro, G.K.T. and Waterhouse, J., 2004. *Disributed leadership in action: A study of current practices in schools*, National College for School Leadership, Nottingham
- Magsaysay, J and Hechanova, R., 2017. Building an implicit change leadership theory. *Leadership and Organizational Development Journal*, 38(6), 834-848
- Mangez, E. and Mangez, C., 2011. Applying a sociological analysis to educational discourse, In: Frandji, D. And Vitale, P., eds/ *Knowledge, pedagogy and society: International perspectives on Basil Bernstein's sociology of education*, Milton Park, Abingdon, Oxon, New York : Routledge 1st ed.
- Marshall, J., 2000. Bright futures and the knowledge society. In: J. Marshall, ed. *Politics, policy, pedagogy: Education in Aotearoo/New Zealand*, 187-215, Palmerston North, Dunmore Press
- Marton, F. and Booth, S., 1997. *Learning and awareness*, Hillsdale, NJ, Lawrence Erlbaum
- Maton, K. and Moore. R., 2010, eds. *Social Realism, Knowledge and the Sociology of Education: Coalitions of the Mind*, New York, Continuum International Publishing
- Mastery.org, 2020. Available from www.mastery.org/why-the-transcript/ (Accessed on 15th July, 2020)
- McCormac, G., 2011. *Advancing professionalism in teaching: A review of teacher employment in Scotland*. Edinburgh: Scottish Government
- McGrath, C., Roxa, T. and Laksov, K.B., (2019), Change in a culture of collegiality and consensus-seeking: a double-edged sword, *Higher Education Research and Development*, 38(5), 1001-1014
- Miliband, D., 2006. Choice and Voice in Personalised Learning. In: *Personalising Education* OECD, Paris, 21-30
- Muijs, D. & Harris, A., 2007. Teacher Leadership in (in)action: Three Case Studies of Contrasting Schools. *Educational Management, Administration & Leadership*, Sage, 35(1) 111-134
- Mursell, J.L., 1955. *Principles of democratic education*. Norton & Company, New York.

- Murphy, J., 2005. *Connecting Teacher leadership and School Improvement*. Newbury Park, CA: Corwin Press
- OECD, 2006. *Personalising Education*, Paris, OECD/CERI,
- OECD, 2018. *The Future of Education and Skills: Education 2030*, OECD Position Paper, Paris, Directorate for Education and Skills –OECD
- Opfer, V.D. and Pedder, D., 2011. Conceptualizing teacher professional learning. *Review of Educational Research*, 81(3), 376-407
- Paludan, J. P., 2006. Personalised learning 2025, In *Personalising Education*, Paris, OECD/CERI
- Pandraud, N., 2011. The recontextualization of scientific knowledge and learning activities, In Bernstein's theory to empirical research, In: Frandji, D. And Vitale, P., eds. *Knowledge, pedagogy and society: International perspectives on Basil Bernstein's sociology of education* Milton Park, Abingdon, Oxon ; New York : Routledge 1st ed.
- Pane, J.F., Steiner, E.D., Baird, M.D., Hamilton, L. S. and Pane, J.D., 2017. *Informing Progress: Insights on Personalized Learning Implementation and Effects*, Santa Monica, California
- Patton, M., 1990. *Qualitative evaluation and research methods* Beverly Hills, CA: Sage, 169-186
- Poekhart, P., Alexandrou, A. & Shannon, D., 2016. How teachers become leaders: an internationally validated theoretical model of teacher leadership development. *Research in Post-Compulsory Education*, 21 (4), 307-329
- Pukey, W.W. and Siegel, B. L., 2002. *Becoming an Invitational Leader*, Atlanta, USA, Brumby Holdings
- Raggatt, P.T.F., 2007. Forms of positioning in the dialogical self. *Theory & Psychology*, Sage Publications, 17(3) 355-382
- Robinson, K., 2007. Do Schools Kill Creativity, (online Ted Talk), Available from https://www.ted.com/talks/sir_ken_robinson_do_schools_kill_creativity/up-next?language=en (Accessed 15th July 2020)
- Rakap, S., 2014. Re-visiting transition-based teaching: Impact of pre-service teacher's implementation on child outcomes. *Learning and Instruction*, 59 (2), 54-64
- Rose, T., 2016. *The End of Average: How we Succeed in a World that Values Sameness* . San Francisco, CA, Harper One.
- Sandberg, J., 2000. Understanding human competence at work. An interpretive approach. *Academy of Management Journal*, 43(1), 9-17

Sandberg, J., 2005. How do we justify knowledge produced within interpretive approaches, *Organizational Research Methods*, 8(1), 41-68

Sidorko, P.E., 2008. Transforming library and higher education support services: can change models help? *Library Management*, 29(4/5), 307-18

Singh, P., 2017. Pedagogic Governance: theorising with/after Bernstein. *British Journal of Sociology of Education*, 38 (2), 144-163

Spillane, J.P., Reiser, B.J. and Reimer, T., 2002. Policy Implementation and Cognition: Reframing and Refocusing Implementation Research. *Review of Educational Research*, 72(3) 387-431

Spillane, J.P., 2006. *Distributed leadership*. San Francisco, CA: John Wiley & Sons

Spillane, J.P., Camburn, E.M. and Pareja, A.S., 2007. Taking a distributed perspective to the school principal's workday. *Leadership and Policy in Schools* 6(1) 103-125

Spillane, J. P. and Coldren, A. F., 2011. *Diagnosis and Design for School Improvement*, New York: Teachers College Press

Stavrou, S., 2011. Reviewing recontextualization of knowledge at university: In Bernstein's theory to empirical research, In: Frandji, D. And Vitale, P., eds. *Knowledge, pedagogy and society: International perspectives on Basil Bernstein's sociology of education* Milton Park, Abingdon, Oxon, New York : Routledge 1st ed.

Supovitz, J.A., 2018. Teacher leaders' work with peers in a quasi-formal teacher leadership model. *School Leadership and Management*, 38 (1), 53-79

Tate, N., 2016. What are schools for? In: Hayden, M. & Thompson, J., eds. *International schools : current issues and future prospects*, 2 edn , (26), Oxford Studies in Comparative Education, Oxford, Symposium Books, 9-16

Templestowe School, 2020 (online). Available on <https://www.subjects.tc.vic.edu.au/> (Accessed 15th July 2020)

Timperley, H.S., 2005. Distributed leadership: Developing theory from practice. *Journal of Curriculum Studies*, 37(4) 395-420

Torrance, D. & Humes, W., 2015. The Shifting discourses of educational leadership: International trends and Scotland's response. *Educational management, Administration & Leadership*, 43 (5) 792-810

Trigwell, K., 2000. A phenomenographic interview on phenomenography, In: Bowden, J.A. and Walsh, E., eds. *Phenomenography*, Melbourne, RMIT University Press, 62-82

Weick, K.E., 1995. *Sensemaking in organisations*, Thousand oaks, CA: Sage

Weick, K. E., 2012. Organized sensemaking: A commentary on processes of interpretive work. *Human Relations*, 65(1), 141 – 153

Willis, J., Churchward, P., Beutel, D., Spooner-Lane, R., Crosswell, L & Curtis, E., 2018. Mentors for beginning teachers as middle leaders: the messy work of recontextualising. *School Leadership & management*, 39 (3-4), 334-351

Woods, P. A., 2005. *Democratic leadership in education*. London: Sage

Whitely, G., 2015. *Most Likely to Succeed*, Documentary Movie, CA, One Potato Productions

Appendices

Appendix A: Ethics Form

Doctor of Education

Department of
Education



ETHICAL IMPLICATIONS OF PROPOSED RESEARCH

To be completed by the student and approved by the supervisor before any data collection takes place. Before completing the form, students should read the guidelines published by the British Educational Research Association (BERA), which are available in Moodle.

Introduction

Full name of student: Tanya Zeine Nizam	Student number: [REDACTED]
Provisional title of your study: Investigating institutional change through the lens of the pedagogical device and teachers' sense of agency during this change	
Justification for your study: The aim of this research is to contribute to current understanding of <ul style="list-style-type: none"> change management in schools which have individualized education as a central goal teacher's perception of their own agency during a process of large large-scale change that aspires to be democratic and created at grass-root level within the classroom 	

Participants

1. Who are the main participants in your research (such as interviewees, respondents)?
Teachers at my current school
2. How will you find and contact these participants?
Placing an announcement on the shared online communication system. Teachers who are interested in participating can then contact me via email or in person
3. How and from whom will you obtain informed consent and communicate the right to withdraw?
I will explain to prospective participants in person and with a written consent form that they have the right to confidentiality and withdrawal at any time
4. Have you approached any other body or organisation for permission to conduct this research?
I have only approached the members of the school board and senior leadership team and gained permission to carry out the research
5. At what stages of your research, and in what ways will participants be involved?
Participant interviews are the main form of data collection
6. Have you considered how to share your findings with participants and how to thank them for their participation?
The data will only be used to inform my EdD thesis and Other publications that arise from it which I

envisage being academic or practice focused.

Deception and exploitation avoidance, confidentiality, privacy and accuracy

7. How will you present the purpose of your research? Do you foresee any problems?

Participants will be told that my interest is in understanding the nature of individualized education as understood by teachers who create the experience at ground level. I will also explain that I am interested in understanding their understanding of their own experience while participating in the creation of a school environment where individualized education takes place.

8. In what ways might your research cause harm (physical or psychological distress or discomfort, or threat to self-esteem) to yourself or others? What will you do to minimise this? Would access to support be available (if appropriate)?

As a teacher and colleague within the same school, boundaries of professional trust and respect need to be addressed in my dealings with participants. In my conversations and interviews, I therefore need to maintain the type of professional relationship that does not inadvertently damage this trust. In my interactional responses to participants' personal opinions, and sharing of professional aspirations, I need to be an empathetic but non-judgemental listener. Confidentiality, in this case, continues beyond the time of the research and into my continued social interactions with the participants within the school community.


9. What measures are in place to safeguard the identity of participants and locations? Are there special circumstances for consideration e.g. special populations?


I will give participants the option to choose a venue to meet for the interviews. It is common practice to see teachers from this school meet for professional discussions in and around the school area, in cafes or small meeting rooms. Therefore, It is likely that participants will choose a convenient location out of these choices without feeling that my presence reveals their participation in this research.

10. How will you record information faithfully and accurately?

I will use an audio recording device to record the interviews. I will then transcribe the interviews.

11. Any additional information:

Student:	Signature: 
	Date: 6 th OCTOBER 2017
Supervising Member of Staff:	Name:
	Signature:
	Date:

Director of Studies (For Research Enquiry Stage)	
	Name:
	Signature:
	Date:

NB

Students should send a signed copy of this form to their tutor (for taught modules) or to the Director of Studies (at candidature), before any data collection takes place. A nil return is required for students not doing empirical work. Supervisors should retain a copy for their own records.

An Invitation to share your thoughts

Dear Colleagues

As some of you will know, I am in the research phase of an EdD (Doctor of Education) program. For this stage of my studies, I would like to interview WAB teachers to understand teachers' sense of agency during large scale institutional change.

This is an open invitation for you to volunteer yourself for an interview and to participate in my research. Interviews will be held at a mutually agreed location and time. Throughout the process and written thesis, participants' identities and contributions will remain anonymous. Please be assured that if you decide to participate and be interviewed, you can also decide to withdraw your comments and participation at any time.

If you would like to be a participant in this study, please email me at tanya_nizam@wab.edu.

With thanks

Tanya Nizam

Confidentiality and Participant Consent

Thank you very much for assisting me in the research phase of the University of Bath EdD (Doctor of Education) program. This research is for the purpose of my EdD thesis and the information within will remain confidential and anonymous. Neither your name or the school's name will be divulged at any stage of the research. I will also ask that this interview be audio recorded for clarity and analysis purposes.

No reference will be made in written or oral materials that could personally link you to this study. The original transcripts and recordings will be destroyed after the degree has been awarded. If at any point in the interview you feel uncomfortable with the line of questioning and/or would not like to answer a question, please say immediately. Your participation in this study is voluntary. You may refuse to participate in this study or any part of this study. You may withdraw at any time without prejudice to your relations with the researcher. You are encouraged to ask questions about this study at the beginning or any time during the research study. A full transcript of your interview taken during the study will be available to you and any comments and critical feedback is welcome.

Participant consent: Please sign below to confirm that you have read the above points, that you will allow/disallow an audio recording to be taken, and that you agree to participate in this study.

Name: _____

Signature: _____

Interview Questions

- | |
|--|
| <ol style="list-style-type: none">1. How long have you worked at WAB?2. What sorts of things helped you decide to take a job at WAB?3. Why do you think you were recruited by WAB? |
|--|
4. How did you first hear about the idea of personalized learning and how has your understanding of this idea developed over time?
 5. Could you describe
 - a. your role in creating personalized education here?
 - b. Other teachers
 - c. School leaders
 6. Could you describe the mechanisms and processes that are in place to help personalized learning to develop?
 7. What is your experience of being involved in this process?
 - a. How did you feel when.....
 - b. How prepared do you feel to participate in this process?
 - i. How does your previous experience help you to relate to
 - ii. Where do you believe you are genuinely able to contribute?
- What factors enable and restrict teachers from enacting their own interpretation of personalized education?***
8. Do you think the personalized learning goals of Flow21 are possible?
 9. What will personalized learning look like day-to-day?
 - a. What sorts of things will be taught?
 10. How does this experience of change fit with your sense of self-development or career development?
 11. Is there a negative side to personalized education?